AMERICAN AGRICULTURIST.

Agriculture is the most healthful, the most useful, and the most noble employment of man.—WASHINGTON.

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A. B. ALLEN, Editor. SAXTON & MILES, Publishers, 205 Broadway.

BUTTER.

WE have no sympathy with those farmers who complain of hard times, and yet make no personal effort to remove them from their own shoulders. Numberless instances of neglect and bad management occur in their operations, which, if guarded against, would afford a ready and profitable sale to their products; but now, will either not sell at all, or at a price which does not at all compensate for the labor and money expended on them. Probably in no article of farm production is this more clearly manifest than in the greater proportion of butter which is made in the interior of this country, and especially at the West. The soil yields good grass, unexceptionable grass; and the cows yield good milk, unexceptionable milk; which, in its turn, yields good cream, and the *beginning* of unexceptionable butter. But the moment art steps into the completion of what nature has so happily begun, there is an end to perfection, unless it be to the perfection of blundering and mismanagement; and the whole operations of master and dairy maid, are, in the quaint phraseology of good old Tusser, "so slabbered and sost," that what might, with care and good management, have been in the highest degree palatable, is made absolutely execrable. We have repeatedly been forced to notice the wretched stuff which passes under the name of butter, found in many of our farm houses and on most of the tables in public houses in the interior,—and which has compelled us to limit our choice of eatables to dry bread and tea or coffee, rather than poison ourselves with the addition of that miserable stuff, which is equally offensive to nostril and palate, and which plentifully besmears every dish that can be spoiled by its presence.

With those who are content to use it at home, or can sell it to such of their neighbors for consumption, as can tolerate it on their premises, the loss is no greater than that of one of the good things of this life which might have been enjoyed by the same expenditure of labor, that an intolerable article is provided.

But in sending the article to market, another result follows, which touches the miserly producer in a far more tender point, than in his taste. Choice butter sent to any of the large eastern markets, will command from 15 to 20 cents per lb. at wholesale; while the wretched stuff usually sent there, is worth only the price of *grease*, for which purpose, it is bought up in large quantities at from 5 to 7 cents per lb., and sent to England for various uses. Now let us look at the statistics of this matter. The product of the dairy for Ohio and Indiana, were estimated, in the Report of the Commissioner of Patents for 1842, to be, in round numbers, $2,600,000. If we take one and a half millions of this for butter, and allow one-third of the whole quantity to be sent to market in bad condition, (and we think we are entirely within bounds, for though no states can make better butter, none certainly make worse than much of it which they export,) we have a difference of about 6 cents per lb., amounting in this case to three hundred thousand dollars, which is annually lost to these two states, from the neglect of ordinary care and attention to this one article alone.

For the proper mode of making and packing butter for a near or distant market, we refer to numerous articles on this subject, in the former volumes of the Agriculturist; and we do not hesitate to say, that they are as complete and concise as anything ever written on this interesting subject. We will now merely state here, that the first requisite is, to have all the articles in use perfectly sweet, and in the utmost state of cleanliness. Milk pails, milk pans, churns, and butter bowls, should be scalded thoroughly, and scoured before using. The second is, to work out

by a dab or paddle every particle of butter-milk. Some dislike working it in cold water, but if properly managed in other respects, we do not consider this objectionable. A third requisite is, to use the very best, *perfectly pure* salt, *finely pulverized*, and have this intimately blended with the butter in sufficient quantity to make an agreeable taste. The fourth is, to have the butter, as soon as ready for packing, carefully put down in clean white-oak firkins or stone jars, crowded so closely as to fill up every part of them, and have the top carefully covered with a clean linen cloth, with salt one inch deep placed on this, and cold water enough added to make a brine. Then keep it in a cool place till ready for shipping.

Since the above was written, we have received our foreign journals of the past month, containing reports of the late proceedings of the English Agricultural Society. In these we find an article "On Preparing Butter for the London Market;" and as the good house-wife is never tired of reading subjects of this kind, we copy it into our columns, thinking she may get a hint or two from it which may prove serviceable even here in our own country. Working butter with the hand, and some other things recommended in this article, may be admissible in the cool climate of Great Britain, but should never be practised in this country.

"The following is the most approved method of making and preparing butter for the London market, and is submitted for the advantage of farmers and dairymen throughout Ireland. Butter made on this system, with care and quick dispatch, will ensure high prices and quick returns. The agent's comment on each dairy's butter, and improvement, are still going on. The best land is old pasture, as free from weeds as possible, with abundance of good water. The cows should not be heated or tormented in any way; housed at night, and fed on green food, and the pasture changed when practicable. In milking, take saltpetre in the pail, one-eighth of an ounce to 8 quarts of milk. The dairy should be perfectly clean, airy, of equal temperature (say 50°), very little light, and completely shaded from sun, by trees or otherwise; and in winter a stove may be required. Strain the milk into coolers, sweet and dry (never mix warm and cold milk), keep it from two to four days, then put the whole of the milk and cream into a clean churn, which is not to be used for any purpose, except during the time it is in operation. Boiling water to be added to raise the temperature to about 68° or 60°, if horse or water power be used. The time occupied is from one to two hours, depending on the size of the churn; but churning should not be continued beyond the proper time. After churning put the butter into two bowls or pans of pickle, made from pure water and fine-stoved salt (as common gives the butter a bad flavor). It should be well washed, and the pickle changed frequently, until all milk is extracted, working with the hand the two pieces alternately, until the grain becomes quite close and firm; when it is to be cured with the finest dry-stoved salt and sugar. The proportion to be one ounce of refined sugar to one pound of salt, to be well worked into the butter with the hand; but the quantity of curing materials will depend on the time and labor given by the dairy-woman, in working and beating the butter (after the salt and sugar are applied), which should continue until all pickle is driven out. The butter should be finished the day it is churned, and then be pressed as closely as possible into the cask. The cask should be well seasoned for some days previous, with strong pickle, frequently changed, or hot pickle; and must be strong and air-tight; the size is of no consequence, if filled and sent off in one week. If not filled at one churning, the butter is to be covered with pickle until the next; but no cask to contain more than one week's butter. If butter should, at any time, appear pale in color, after churning has commenced, a little grated carrot-juice may be put into the milk, and will not injure either milk or butter. All butter should be at the place of shipping one day prior to the steamer leaving, so as to run no risk of going forward to the agents."

STAVES.

Since the late reduction of duty in Great Britain on staves from the United States to 28s. per 50 cubic feet, they will become an article of considerable export; it is important, therefore, that they should be properly prepared for the English market. For the benefit of those farmers engaged in the stave business, we subjoin, from a circular recently received here, the principal directions to fit them for the British market.

Size.—The standard to which staves are now limited is 72 inches long, 7 inches broad, and 3 inches thick, and it is always very desirable to get the staves of this full length and breadth, length especially. By making them 72 inches long, they suit at once for the sides and ends of all puncheons for the West India trade, and also for the side of sugar hogsheads. For brewers' casks, both for the home and export trade, there is a large demand for white oak staves, 30, 37, and 47 inches long, 7 inches broad, and 1¼, 2¼, and 3 inches thick. The present standard thickness of Canada pipe staves, viz.: 1¼ inches, is very suitable for coopers in general, but 1 inch, 2 inches, 2¼ inches, and 3 inches, are all used, although the thick sizes are considered less valuable, and scantlings with large proportions of those in them do not take the market so well. Besides the full length of 72 inches, the only other sizes at which staves should be cut are 42 inches and 33 inches. These lengths would answer the home cooper trade generally, and suit exactly for West India casks, &c. The lengths of 30 inches to 33 inches, are also the sizes required for beef tierces; and if split at the proper thickness of an inch, or rather less, or if they were of such thickness as would split into an inch, large quantities of them might be disposed of. These are what have hitherto been called pipe staves. As regards small staves, the only length it would be worth sending is that of 42 inches. Of these there are three kinds which require to be specified: 1st, rum puncheon; 2d, molasses puncheon; 3d, sugar hogshead. Rum puncheon and molasses puncheon staves are cut 42 inches long, and should stand at least 1 inch thick in the rough state. A similar stave, for spirit casks, &c., 45 inches long, and 1¼ thick, would generally find a ready sale. Some hogshead staves are 42 inches in length and three-quarters of an inch thick. Particular attention should be paid to make them stand about an inch more than the lengths stated, to allow for working them to the net size.

For the London Market, hogshead staves, 42 inches

and upwards, and pipe staves, 54 inches and upwards, are the most suitable.

Kind of Wood.—All the pipe or double staves above specified are of white oak, and also those for rum or spirit puncheons and beef tierces. Molasses puncheon staves are of red oak. For sugar hogsheads, red oak is the best stave, although both white oak and ash are used, and would sell well for the purpose.

The sizes of staves imported into Scotland are uniformly taken at the shortest, narrowest, and thinnest parts, *exclusive of sapwood.*

TO BREED MALES AND FEMALES.—In a recent conversation with Dr. J. V. C. Smith, of Boston, Mass., he informed us, that the late Mr. Jonathan Allen, of Pittsfield, successfully bred males or females among his Merino sheep, by cutting out the left testicle of his rams when he wanted males, and the right testicle when he wanted females. We wish some of our friends would immediately commence the same experiment with different kinds of animals, and let us know the results of it. The knowledge of any system of breeding males and females which could be generally depended on, would be of great importance to stock growers.

MR. PRENTICE'S SALE OF SHORT-HORN CATTLE.

Improved Stock Getting on its Legs Again.—The sale of Mr. Prentice's large herd of Short Horns, came off, as advertised, on the 25th of June, at his beautiful residence, Mount Hope, near Albany. The weather was very propitious, and a large and highly respectable company were present from our own, and the neighboring States, and the Canadas—few of whom we learned, came to the sale out of curiosity, but with the intention of purchasing. It will be seen below, that the prices obtained were pretty satisfactory, considering how excessively dull everything has been in this line for the past four years. This sale has settled the matter of Short-Horns, and shown the public *that they are appreciated*, and that those who will properly breed and rear them, may hereafter expect remunerating prices for so doing. Mr. Prentice deserves the gratitude of his contemporaries for the stand he has taken in this matter. He has thrown himself boldly into the breach—carried his point—and come off triumphantly. We have heard but one expression on the part of breeders on this subject, and that was, thanks to Mr. Prentice. One thing at least is settled by this sale, and that is, Short-Horns will *advance* rather than *recede* in prices for years to come; it will also have a good moral effect on other kinds of fine stock. We can now say to the farmers, cheer up—think no more of dull times—keep on in a judicious, steady course of improvement of all kinds, and you will be sure to reap a fair reward for your labors.

The arrangements for the sale were admirable. The animals were allowed to range at will in their accustomed pasture, a large park near the mansion. The cattle were in fine condition, and made a superb show as they dotted the park singly and in groups, grazing at their ease on the luxuriant grass, sipping at the clear, refreshing waters, or ruminating in the grove or beneath clumps of noble old trees. The company had the whole morning till 12 M., to examine the stock; they were then invited to an excellent collation in a grove hard by, after which the sale commenced. It was conducted by Mr. L. F. Allen, of Black Rock, assisted by Mr. Jones, of Albany, as auctioneer. The bidding was spirited, and the whole thing was over in less than two hours. The greatest competition was for those of approved milking qualities.

COWS.

Flora—8 yrs old, J. B. Nott, Guilderland	$215 00
Moss Rose—8 " old, J. W. Wheeler, Hyde Park	140 00
Catharine—6 yrs old, M. Bates, New York	105 00
Snow Ball—11 " old, E. H. Smith, Smitht'n, L.I.	110 00
Melissa—8 yrs old, W. S. Packer, Brooklyn	120 00
Cora—4 yrs old, Dr. Jas. McNaughton, Albany	125 00
Daisy 7 yrs old, do. do.	105 00
Diana—6 yrs old, J. W. Bishop, Berks. co., Mass.	155 00
Charlotte, 5 yrs. old, do. do.	190 00
Ada, 4 yrs old, R. H. Green, Winslow, Maine	170 00
Appolonia—10 yrs old, J. P. Brayton, Bethleh'm	160 00
Louisa—5 yrs old, R. H. Green, Winslow, Me.	150 00
Splendor—11 yrs old, W. S. Packer, Brooklyn	190 00
Jenny—4 yrs old, Edward H. Smith	105 00
Aurora—10 yrs old, J. B. Nott, Guilderland	145 00
Miss Smith—8 yrs old, P. W. Tuthill	80 00

HEIFERS AND HEIFER CALVES.

Caty—11 months old, W. S. Packer, Brooklyn	$100 00
Comely—4 months old, Wm. Kelly, Rhinebeck	70 00
Nun—3 years old, do. do.	110 00
Meg—1 year old do. do.	65 00
Nell—3 years old, M. Bates, New York	225 00
Betty—6 months old, Wm. Kelly, Rhinebeck	55 00
Rover—1 year old, V. P. Douw, Albany	70 00
Calf, 2 weeks old, J. H. Prentice, Brooklyn	50 00
Calf, 2 months old. W. S. Packer	45 00
Burley—1 year old, V. P. Douw, Albany	80 00
Peggy—3 years old, J. P. Brayton, Bethlehem	200 00
Peggy, 2d—4 months old, V. P. Douw, Albany	110 00
Ramble—1 year old, W. S. Packer, Brooklyn	75 00
Jilt—10 months old, Wm. Kelly, Rhinebeck	60 00
Calf, 1 month old, J. P. Walker	77 50

BULLS AND BULL CALVES.

Calf, 1 month old, W. S. Packer, Brooklyn	$40 00
Blaize—4 " old, R. H. Green, Winslow, Me.	55 00
Tyro—5 months old, J. B. Nott, Guilderland	55 00
Tecumseh—1 year old, W. S. Packer, Brooklyn	200 00
Calf, 2 weeks old, J. P. Walker	30 00
Calf, 1 month old, W. Kelly	75 00
Duke—6 " old, Gen. Kimball, Newfane, Vt.	200 00
Calf, 3 days old, J. P. Walker	25 00
Timour—11 months old, M. J. Hayes, Montreal	80 00
Fairfax—5 years old, W. S. Packer	205 00
	$4,622 50

Altogether, forty-one animals were sold from the lot on the catalogue, averaging, within a fraction of $113 each. Of the other animals, Matilda, Sally, Juda, and Esterville, were bid in by Mr. Prentice, agreeably to the terms of his advertisement; Caroline was withdrawn for want of a bid; Dutchess and a calf died; Dora was sick; and O'Connell, by motion of Mr. Stevens, seconded by a vote of the whole company, was withdrawn. This last was totally unsolicited by Mr. Prentice, but was a spontaneous movement on the part of the company present, expressive of their high satisfaction of his conduct of the sale, and a wish to compliment him with the privilege of retaining a fine animal to which he seemed much attached. For pedigrees of this herd see May number of current volume, page 166.

STABLES.—NO. 3.

Horses should be well separated from each other, in stables. This is important and indispensible for horses in work. They must rest, that they may labor. If put into the same stall, they will neither lie down if it be small, and only one will lie at a time if it be large. They should then be separated always. This is best done by an ordinary partition, sufficiently high to prevent communication. Even tired horses will play with each other, if they can, and all the time devoted to amusement is taken from rest, and with a laboring horse this is a loss; partitions are therefore necessary. When they are to be made, the cut of last month will give a good plan. But there are cases where partitions cannot be made. Then division poles or bales should be used. The cut (fig. 59) will show their manner of construction. These *poles* or *bales* should be of oak wood, eight feet long and three inches in diameter. Each pole should be suspended from the head and heel post, by a chain one foot in length. If the horses are disposed to bite the pole, cover it with tin, or sheet iron, near the head. The pole should be three feet to three and a half high above the floor. The attaching chains allow the pole to move when the horse turns.

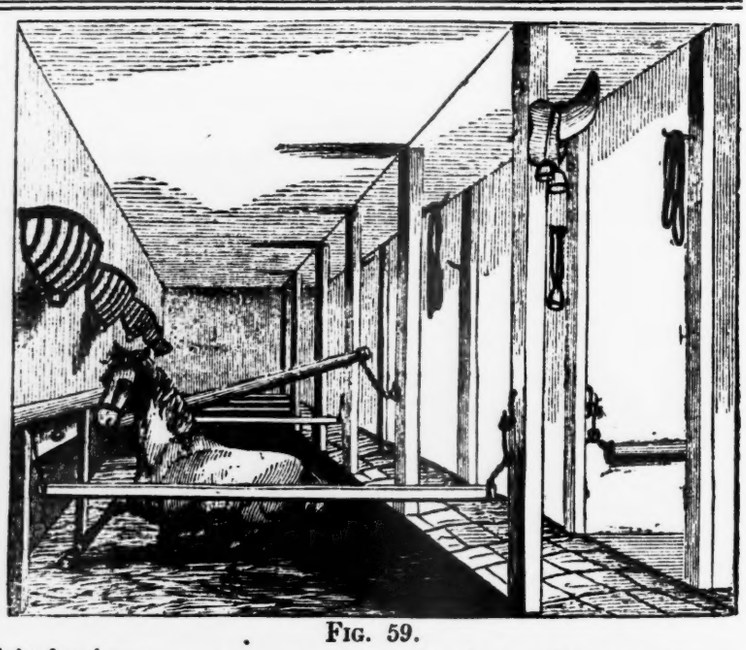

Fig. 59.

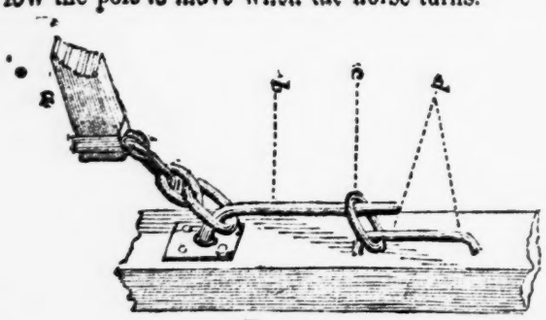

Fig. 60.

The cut (fig. 60) shows an improved method of attaching the pole. It will prevent accidents which sometimes arise from the ordinary pole, if the end next the head is attached by a hinge, so that the pole may be moved up and down at the heel end. If the horse gets under the pole, it moves up; and if he gets his leg over, it can be lowered. This is effected by *b*, a curved bolt, by which the pole is attached to the heel post. It turns round on the post. It is retained in its upright position by the ring *c*, which slides on the bracket *d*. When the pole is to be let down the ring is raised and the bolt turns and frees the pole.

The objections to poles are, that the horses do not rest perfectly; play with each other; and communicate readily contagious diseases. They should never be used if avoidable.

Guano.—The excessive dry weather the present season, has been very adverse to the experiments made with guano. It requires lying in compost nearly three months, or moist weather immediately after applying it, to fully test its powers. We hope, therefore, the partial failures this year, will not deter our farmers in this vicinity from making experiments with it during a more auspicious season. Its value is unquestionable, and the application easy; besides, it is entirely free from the seeds of weeds.

A RAMBLE IN ALBANY.

After Mr. Prentice's sale of stock was over, we spent a day rambling among the breeders in Albany and its vicinity.

Farm of Mr. Sotham.—The first we called upon, was Mr. Sotham, of Hereford Hall, so famous for his superb flock of Cotswold sheep and Hereford cattle. We had not been there for upwards of two years, and found that his stock had increased rapidly, and been bred with much attention to its fineness of points, and general good qualities. The farm likewise had been judiciously looked after, and the land is improving rapidly under a renovating system of cropping. Among other things, we were much interested by an experiment of paring and burning a field of about sixteen acres, for a crop of turnips. This is a method of ameliorating the condition of soils, especially those of a heavy texture, that is little understood and less practised in our country. We hope to have full particulars of it hereafter, from Mr. Sotham. Mr. Ambrose Stevens has promised us a series of articles on this farm, its management, and the stock; and as he will do so much better justice to the subject than we are able to, we shall forbear saying anything more on this head at present. But what a pleasure to us would it be to ramble over the country could we always meet with such good stock and excellent management as pervades Hereford Hall. How people—and those too who are wealthy—can keep and propagate such animals as they do is a mystery to us. We would have some sort of breed around us that looked alike, even if it were nothing superior to black Galloway cattle.

Farm of Mr. Prentice.—This, too, has been brought up to a high state of fertility since we last saw it, much of which has been accomplished by waste manures—skin and fur trimmings, &c.—which were formerly thrown into the streets in Albany, and there left a disgusting nuisance, to gradually decay and perish. Mount Hope, the residence of

Mr. P., is a beautiful spot, commanding a varied and delightful view of the Hudson river and scenery for a wide distance around—one of the most agreeable objects of which is the Patroon's island lying directly in front of his farm. It is an alluvial soil, of great fertility, and being annually overflowed by the Hudson, it remains *unfenced*. We wish such of our readers as like to be cooped up in miserable bounds of stone and wood, could have a half-hour's look at this *free* island, beautifully checkered with crops of grain, roots, and grass, and unmarred by the unsightly divisions of post, rail, or stone. We are certain it would make them sick enough of the fencing system for one life.

The buildings at Mount Hope are elegant and commodious, with ornamental grounds in front of considerable extent, and a superb garden of six acres in the rear. A wide strip of natural forest trees belts it on the north, while thick thrifty hedges of hawthorn and mulberry, running in parallel lines, protect it on the west. Beyond this is an extensive arboretum, composed of every variety of forest and ornamental tree that will grow in this latitude. There are many other things deserving note here, but we have neither space nor time to record them.

Farm of Mr. Vail.—This is in Troy, six miles above Albany, and has been described pretty fully in our second volume. Since we were last there his stock has been increased considerably. The queen of his herd is Lady Barrington, sent out to him from England last October, by Mr. Bates, of Kirkleavington, in order to give a fresh cross. She is a superb cow and of a bright red color. Mr. Vail is paying much attention to the milking qualities of his stock, and all of his cows, with we believe, a single exception, stand well at the pail. He deserves great credit for being thus particular, for we must have good milkers in this quarter; further west, where they raise stock solely for their beef, this point is not of so much importance.

Mr. Z. B. Wakeman, of Herkimer, recently purchased a bull and heifer calf from this herd. They are fine animals, and we think will greatly improve the stock in this famous dairy county. We would advise Mr. W. to beware of a Dutch *boar* cross in these animals, otherwise the reputation of Mr. Vail's stock may suffer in his hands —(Vide the June number of our current volume, at the bottom of page 184.) Mr. Verplanck, of Fishkill, has just purchased a fine Durham cow, of Mr. V., and Mr. Hays, of Montreal, a yearling heifer. The prices obtained were satisfactory, and with Mr. Prentice's late sale, shows an increasing demand for improved stock, which we would fain believe is likely to continue. It is impossible that the farmers of this country should be satisfied with standing still; the produce of our dairies is becoming too important to do so. A few years ago we exported no cheese of any consequence. Under a revision of the British tariff we sent out in 1841,—15,154 cwt.; in 1842,—14,098 cwt.; in 1843,—42,312 cwt.; in 1844, 58,115 cwt., thus quadrupling our export in three years. In addition to this, the Northern States have exported large quantities of butter, and we have not a doubt, if proper attention be paid to the improvement of stock, and the making of butter and cheese, that the exportation of these articles will be shortly doubled. We may also greatly increase our exportation of beef.

CARBONIC ACID GAS.

We notice in the Farmer's Herald (English), an inquiry as to what becomes of the large amount of carbonic acid gas, which is generated during winter in the northern hemisphere, by the combustion of coal, wood, &c., besides what is thrown off by the respiration of animals. To us the inquiry seems of easy solution, notwithstanding an analysis of the atmosphere at all times and in all places, shows the presence of about the same proportion of this gas in it; which is something less than the one-thousandth part of the whole. Supply and demand in this important ingredient of vegetable nutrition, as in all the other arrangements of the great Author of nature, are beautifully harmonized, and excess or deficiency are equally guarded against.

During the season of active vegetation, large demands are made upon the atmosphere for this gas, to supply the growing plants with their largest constituent, while comparatively little is yielded by the combustion of fuel, &c. The excess in winter and the deficiency in summer are effectually avoided by the activity of the atmosphere itself, and the constant intermingling of its varied ingredients and their rapid distribution over the entire globe. In the rigors of a northern winter, we have a preponderating northerly wind, which wafts the air at the rate of from five to fifty miles an hour towards the equator and southern hemisphere, where vegetation is in the highest state of activity, and demands large quantities of carbonic acid, which it condenses and treasures up, till combustion or decomposition sets it free, again to mix with the air, and again to form new elements of vegetable life and nutrition. During our northern summer, the currents of the atmosphere are reversed, and we then have the deficiency which would otherwise exist, made up by the prevailing breezes from the south.

But the atmosphere is so vast a store-house of this substance, that any considerable local causes operating in increasing or diminishing the supply can hardly be felt in the general result, and ages might elapse, with all the operations of nature working on one side of the balance, without prejudicially affecting the general result.

Kohl-Rhabi.—We notice considerable attention is being paid to the culture of this plant in England, for a field crop. It is said to resist frost and the drought better than turnips, and is not preyed upon so much by insects. It is of the *brassica* family, quite like a half-bred between the cabbage and turnip in its leaves—the stem swollen like a tuber, and often attaining the weight of 14 lbs. or more. As a garden vegetable it has been cultivated for some years in Great Britain, and we hope it may prove valuable as a field crop. We believe it originated in Germany, as it is much cultivated there. It is sown as early as mangel-wurzel, and may be cultivated like cabbage or turnips. We grew it one season in our garden; but it not proving equal, in our estimation, to cabbage or turnips, we gave it up. Perhaps others in the United States may be more successful. We would recommend a faithful trial of it among our farmers and gardeners.

Ramble in Connecticut and Massachusetts.—Having made a short excursion in these States the past month, we shall give some account in due time, of two or three farms we visited in our flying trip.

NEW YORK STATE AGRICULTURAL SHOW.

A MEETING of the Executive Committee of the State Agricultural Society was held at Bagg's Hotel, Utica, on the 10th July. Present:

B. P. JOHNSON, President.

H. W. DOOLITTLE, Herkimer, E. P. PRENTICE, Albany, H. S. RANDALL, Cortland, Vice Presidents. L. TUCKER, Recording Secretary. D. LEE, Corresponding Secretary. GEORGE VAIL, Troy, T. S. FAXTON, Utica, MAJ. KIRBY, Brownville, J. M. SHERWOOD, Auburn, GEORGE GEDDES, Onondaga, Managers.

The President of the Oneida County Agricultural Society, E. Comstock, and a number of the officers and members of the Society were present at the meeting.

The following gentlemen were appointed a Committee of Arrangements for the Show:

B. P. JOHNSON, Rome; ALEX. WALSH, Lansingburgh; J. M. SHERWOOD, Auburn; GEORGE GEDDES, Tyler, Onondaga Co.; LUTHER TUCKER, Albany; E. COMSTOCK, Rome; T. S. FAXTON, Utica; SPENCER KELLOGG, Utica.

The following gentlemen were appointed a Committee to confer with the railroad and boat companies, in relation to the transportation of stock and articles designed for exhibition:

J. M. SHERWOOD, Auburn; HORATIO SEYMOUR, Utica; M. D. BURNET, Syracuse; L. B. LANGWORTHY, Rochester; LEWIS F. ALLEN, Buffalo; GEORGE VAIL, Troy; THOS. HILLHOUSE, Albany.

The judges for the Show were appointed, and the list will be published as soon as it shall be ascertained from the gentlemen appointed that they will serve.

The following additional premiums are to be given:

For the best corn and cob crusher, to be operated by horse power,				$10 00
For the best thorough-bred stallion, 4 years old,				20 00
" 2d	"	"	"	10 00
" best draught	"	"	"	20 00
" 2d	"	"	"	10 00
" best fat cow or heifer			"	10 00
" 2d	"	"	"	5 00
" 3d	"	"	vol. of Transactions.	
" best grade yearling heifer			- -	5 00
" 2d	"	"	Colman's Tour.	
" 3d	"	"	vol. of Transactions.	
" best heifer calf		"	Colman's Tour.	
" " native yearling heifer			- - -	5 00
" 2d	"	"	Colman's Tour.	
" 3d	"	"	vol. Transactions.	
" best heifer calf			Colman's Tour.	
" " samples, of not less than three cheeses from each of 10 dairies in any one county, $20; 2d best $10; 3d best, $5.				

A Committee on behalf of the citizens of Utica, of which his Honor, E. A. Wetmore, Mayor of the city, was chairman, waited upon the Executive Committee of the State Society. The several locations for the Show grounds, which had been selected as proper places for the Exhibition, were examined by the officers of the State Society, and they decided that the grounds on Mr. Thorn's farm, on the New Hartford turnpike, were, upon the whole, best adapted for the exhibition of the Society, and the accommodation of the owners of stock who may attend.

The spirit manifested by the citizens of Utica, was most gratifying to the officers of the Society, and gives assurance that everything desirable to make the approaching Show one of the most splendid exhibitions ever witnessed in this State, will be done so far as the citizens of Utica are concerned.

We will not for a moment doubt that the farmers of Oneida and of the adjoining counties, will present an exhibition of their stock, dairies, and domestic manufactures, and worthy, not only of Central New York, but of the Empire State.

The additional premiums offered for samples of the best ten dairies in any one county, it is believed will secure an exhibition from the best dairy counties, more extensive than has ever before been seen at the Shows of the Society.

Permit me to say to the citizens of Utica, that there is much labor to be done, to have everything in order for the Show. Your enterprise and your energy is known and appreciated. If you would excel Poughkeepsie, let me say, it will all need to be put in requisition. That it will be so, I shall not doubt, unless reluctantly convinced when our grounds shall be thrown open to the thousands who will be in attendance on the 16th and 17th of September.

Persons desirous of becoming members of the Society, and of competing for the premiums, are requested to enter their names at the stage office of J. Butterfield & Co., adjoining the National Hotel, Genesee street, Utica. The fees for membership are $1. AN OFFICER OF THE STATE SOCIETY.

NEW YORK FARMERS' CLUB.

MEETINGS will be held at the American Institute the 1st and 3d Tuesdays of each month, at 12 o'clock, M.

At the first meeting last month, Mr. Meigs read some translations from the *Revue Scientifique et Industrielle*, on the subject of soiling cattle. Another, stating that a gentleman had sold to a Paris perfumer, rose-leaves, from half a hectare of land, to the amount of 1650 francs. The article was equal to any obtained in Constantinople, and might be easily cultivated in the United States.

Hon. Branch T. Archer, Gen. T. J. Green, and Mr. Rose, of Texas, were then introduced to the meeting, and Dr. Archer delivered an Address, on the advantages and capabilities of Texas. Gen. Green promised at some future meeting to make some further remarks on Texas.

Some New Zealand grass was next produced, showing a remarkably strong fibre.

A conversation now ensued on the diseased livers of western beeves. Some thought it arose from overdriving. Dr. Underhill was of opinion that nine out of ten of all western cattle were diseased in the liver.

The subject of the day being called for, Dr. Underhill made some interesting remarks on the manner of preparing the ground for turnips, ruta baga, carrots, &c. The carrot crop was recommended as excellent food for horses and horned cattle.

Superior new potatoes about seven inches in circumference, were then presented by Mr. Ross of Astoria. They were planted on the 30th of April, and thus, in about sixty days were brought to maturity *by electricity*. Mr. Ross has another battery applied to various vegetables, which has not accelerated their growth at all. This may be owing to the fact that peach trees rise above the poles which support the wires. A distance of about 60 feet between the zinc and copper plates intervenes in this battery. It is arranged just like the one which is working well.

At the second meeting, Mr. Meigs read a translated article from the French, on the products of Abyssinia.

Dr. Page, of Texas, followed up the subject of the agricultural productions of Texas, showing it to be a country of great fertility.

Mr. Ward of Arkansas exhibited three specimens of three varieties of the Arkansite—a stone, of inimitable qualities for giving edge to tools of all sorts. These specimens are not in the same condition in which they come from the quarry. I have subjected them to a process which I do not yet reveal, by which their native properties are enhanced to such a value, that some nice artists have said they are, for the purpose of giving edge to certain instruments, worth their weight in gold. The stones of various colors were exhibited to the club and very much admired. It has been stated by the best judges that those Arkansites are worth twenty times more than any oil stones in the world beside.

The regular subject, substitutes for a short crop of hay was now introduced.

Mr. Fleet—Millet has been recommended, as it ripens in a very short time—but the great difficulty is in saving its seeds from the birds. When sown later it may be a safer crop, for the birds are then mostly departed. It is a pretty good substitute for a short crop of hay—yet I have never found stock to prefer its straw to hay.

Dr. Underhill—It makes pretty good hay—but the land must be very rich, for it draws off the richness of the soil greatly; no crop more so. It ought always to be cut when in blossom, for then the saccharine matter is in the stem. If you cut it after the seed is ripe, it is then of comparatively little value. But the best substitutes for hay are roots, and fodder made from corn sown broadcast or in drills. In this way a heavy crop is cut. Plant on low grounds that are moist, and cut when the corn silks. At this season you cannot rely on a supply from showers on your uplands. Plant on the low lands. At the same time plant the turnip both white and red. Use up all your white turnips first, then take to the yellow, for they are more solid, more nutritious, and will keep perfectly till next spring.

Plant Deal's Aberdeen turnip.—It is a hybrid, formed from the yellow Aberdeen and the ruta baga You may sow these turnips until the first of August; although it is better that the Aberdeens were in the ground now. The white turnip comes a little later. The white Norfolk turnip may be sown any time these three weeks. The white-globe turnip, excellent for the table—also the white Dutch, may be sown three weeks hence. Gentlemen ought to try all kinds. Ruta baga has, for some years, run rather too much to top—but I am raising it this season. Turnips may be sown between rows of corn, but free ground is decidedly best for them.

Mr. Fleet—The Doctor should have made a distinction between cold and wet or moist soil. The latter will do well, but the former will not answer.—As to corn stalks for fodder, there is some difficulty in curing it properly.

Dr. Underhill—Lay a rail on crotches, stand up the corn stalks on both sides, leaning against the rail, and about three or four thicknesses, and they will be cured. They must not be bound together. A crop of corn stalks, sown broadcast or in drills, as late in the season as this, is greater by tons per acre than the best hay. I advise sowing three or four bushels of corn per acre broadcast. The saccharine matter in the stalks remains there until the silking of the corn takes place; then is the time to cut it, for then it is present in the stalks, but after that it rapidiy disappears from the stalk, is then decomposed, and is concentrated in the grain, and forms the farina. A peck of salt thrown over each load of stalks when drawn into the barn, will preserve them, if a little too green, and the cattle will relish them the better for it.

Mr. Fleet—Some persons adopt the sweating process—first wilting and putting the corn stalks in stacks until they sweat, then spreading them out to dry.

Dr. Underhill—I propose as a subject for the next meeting—The Destruction of Grain and Fruit in the United States, by Insects, and the Preventives and Remedies. Adopted.

HENRY MEIGS,
Secretary.

ELECTRICITY APPLIED TO AGRICULTURE.—Several experiments have been made in electricity in this vicinity the present season, on the growing crops; but so far as we can learn, without any decided advantage to them. Whether the disappointment in these experiments is owing to the extreme dry weather, or an improper fixture of the electrical wires or galvanic plates, we are unable to say; for certain it is, that electro-culture has been highly successful in many instances, in bringing crops forward much more rapidly than they would otherwise have been.

ST. JOHN'S DAY RYE.—Have any of our readers ever cultivated this crop in America? If so, we should be glad to hear the result of the same. It is extensively grown in Belgium, and with great success. From what we hear of this rye, it must be an excellent crop for early spring food, and soiling during a dry season. Mr. Saul says of it, in the New Farmer's Journal, "the time for sowing it is about the latter end of June or the beginning of July, and by October it will have produced a large heap of foliage fit for use. It will stand, with little change, during the winter, being cherished by the young growing foliage which shoots up early in the spring, and is covered with a thick mantle by the end of February or the beginning of March. It furnishes an abundant supply of fine green fodder, and possesses great merit from its superior sweetness, and the long time it affords its valuable food. When left for seed, it will grow from six to seven feet high.

SHEEP AND WOOL IN THE SOUTH.—We notice in an article in the South Carolinian, that Leicester lambs 14 months old, from the flock of Col. Wade, Hampton, sheared from 11¼ to 13¼ lbs. of wool; and that 60 head of lambs dropped the *present year*, and shorn when hot weather came on, to relieve them from the oppressive heat of summer, averaged 4 lbs. each! So much for growing wool at the South, where some folks are so stupid as to believe good sheep cannot exist!

GREAT YIELD OF WOOL.—The Merino flock of Mr. J. Speed, in the vicinity of Ithaca, averaged the past season, five pounds clean washed wool per head, for which he has been offered 40 cents per pound.

TO THE BREEDERS OF SHORT-HORN CATTLE.

Circular.—About a year ago, at the solicitation of a number of gentlemen interested in the breeding of Short-Horn cattle, I published a notice in several of the Agricultural papers of the United States, that I would get up an American Herd Book, provided my efforts should be seconded by a respectable portion of those engaged in that pursuit. Although slow in their responses, a considerable number of breeders have forwarded the pedigrees of their herds for insertion, according to the terms of my proposal. Many, however, and among them, some of the early and distinguished promoters of this branch of agricultural improvement, remain unmindful of this opportunity of thus recording their valuable stock.

A sufficient number of individuals having already contributed the pedigrees of their cattle to insure its publication, the work will proceed as soon as circumstances will permit, which will be *within three months* from this time.

I presume no arguments will be necessary with any systematic Short-Horn breeder, to convince him of the necessity and convenience of an American registry of his cattle, other than such as will suggest themselves to his own mind, and those already advanced in my two several notices to breeders already published.

In case you think proper to register your cattle in the proposed work, you will please transmit your catalogue of thorough bred animals (none other being admitted) with as little delay as possible, to me (post paid) at this place, with the registry fees accompanying them, and stating also the number of copies of the work you wish for, when published.

I will here remark, that the month of October next, *will be the latest period* at which pedigrees can be received, as the work will be put in press immediately after.

The terms for registry are as follows:

For a single animal, one dollar.

For any greater number, not exceeding ten, fifty cents each.

For a number exceeding ten, forty cents each.

The work itself not to exceed three dollars a copy.

If any gentleman of your neighborhood or acquaintance be a breeder of Short Horns, and not in receipt of this notice, you will confer a mutual favor by giving him the above information. LEWIS F. ALLEN.

Black Rock, N. Y., July, 1845.

SOWING WINTER WHEAT IN DRILLS.—We have over and over again recommended that wheat should be sowed in drills, for one gets a better crop in so doing, and it is much less likely to rust. We have usually recommended that these drills should be from six inches to one foot apart; but we are not sure, where it is especially liable to rust, that from one foot to two feet may not be better. An experiment was lately tried in Australia of sowing wheat in rows of *three* feet apart. It yielded 41 bushels to the acre, and no rust or mildew appeared in it; while, in the adjoining fields, sown broad-cast or in quite close drills, the yield was not so great, and more or less rust appeared. Will some of our wheat growers make experiments in sowing patches of wheat, side by side, this fall—some broad-cast and some in drills from six inches to three feet apart, and give us the result of their experiments next season? We need not add that these experiments should be made with the same kind of seed, sown on the same kind of soil, and treated in all other respects as nearly alike as possible.

CLEAR PORK.

IT is often asserted by those prejudiced against the Berkshire breed of swine, that they will not cut clear pork; that is, side pork for barrelling, free from lean. This is a great error, as we know from our own experience. But, to put the matter at rest, we give the following letter on this subject, from an extensive and disinterested packer in the west, addressed to the Messrs. Steddoms, of Lebanon, Ohio, and forwarded us by a friend for publication. The truth is, that the Berkshires are so round in their body, that they look fat before they really are so. People are thus freqently deceived by their appearance, and they are consequently killed too soon; and hence the mistaken opinion, that they give lean side pork. They have lean hams and shoulders only, and these are what we want.

GENTLEMEN: The 163 Berkshires, bought of you, made 101 barrels of pork; and in consequence of their being some other hogs mixed with yours (Graziers and Yorkshires), I could not tell how many barrels of clear pork there was; but I know that John Steddom's 30 hogs all made good clear pork, and all heavy but one—all full breed Berkshires. Also, out of Mr. Hollingsworth's 46 head, 34 made clear pork. I have cut pork thirteen years in succession, and have cut more than fifty thousand of as good hogs for the number as any man can cut, as I believe, and I never cut 163 as good hogs as yours. I believe them the best ever cut in the Miami Valley—the most free from lean and the least bone. You may talk about your Yorkshires and Graziers, and shift and change your breed as often as you please, and after all, you cannot get a better breed than the Berkshires. The hog that I call the best is the one that has the most meat for the least bone. JAMES HARRIS.

Waynesville, Jan., 11, 1845.

LARGE AVERAGE CLIP OF WOOL.—We have a flock of sixty-five full-bred Merino sheep, which sheared this season 304 lbs. of wool, averaging within a fraction of 4 lbs. 11 oz. per head. Twenty-three of the lot are yearlings, and averaged 4 lbs. 14 oz. per head. The average weight of fleece of bucks is over 9¼ lbs. The sheep were well washed, and the wool clean, and in good order, with all, except Protection, who sheared 11 lbs. 13 oz. of clean wool, though unwashed. If any one has sheared a better crop of wool, we would like to see it reported.

R. R. & L. G. COLLINS.

Butternuts, Otsego Co., N. Y., 7th mo. 15th, 1845.

A LARGE CROP OF WINE.—N. Longworth, Esq., of Cincinnati, Ohio, writes us, that the promise of his grape crop this year was highly flattering; and that his vine dressers estimated the wine crop from them would be at least 500 barrels. It will be seen from this, that we may ultimately be independent of Europe for our wine; and we think that the day is not distant, when the valley of the Ohio will be quite as celebrated for its vineyards as that of the Rhine, and other parts of Europe.

From the Saturday Courier.

DIRECTIONS FOR CULTIVATING CORNSTALKS, AND MAKING SUGAR.

In various portions of the country, the cultivation of corn for the manufacture of sugar continues to excite attention. The public are seeking information upon the subject, as the discovery that sugar can be made from the stalks of corn is of recent date. We take pleasure in presenting our readers any facts that may be of importance upon the subject. Dr. Naudain, of Delaware, who has had opportunities to gather knowledge upon the various experiments that have been made, presents some views which will not fail to be regarded with interest.

With regard to the culture, it is stated that corn should be planted as broom-corn is commonly planted, very close in the row, probably a stalk every three or four inches. The tillage will be the same as for broom-corn. When the young ears begin to appear, it is necessary to pluck them off carefully, and to repeat the gathering as often as necessary, so as *to prevent the formation of any grain.* Because, if grain be allowed to form, it takes all the sugar from the stalk. About the time the corn begins to harden, the making of sugar should be begun.

It is not necessary to say anything about a proper mill to crush the stalks and separate the juice, because mills of the cheapest kinds only should be employed now, until the business would fully warrant an expensive outlay. It would probably be found that the common cider mill, with plain cylindrical nuts, would be quite sufficient for the farmer who would raise a fourth or half an acre of corn for sugar, for his family, and this quantity would be quite sufficient for satisfactory experiment.

When the juice is separated from the stalk, about a table-spoonful of whitewash, made of the *best quicklime*, and about the consistence of thick cream, should be added to each gallon of the juice, and then the boiling should commence. The scum that rises should be carefulfy removed; and the juice, if this process has been properly conducted, will be quite clear, nearly colorless. Then commences the process of evaporation; and when the juice has boiled down in about the proportion of eight gallons to one, the boiling will be completed, and it may be poured out into a shallow, tight wooden box to grain.

It has been ascertained, although as yet the reason is not known, that if the juice be boiled in a deep vessel, like the common cooking vessel, sugar will seldom be obtained; while, if it be done in a shallow vessel, so that the juice at the commencement of the boiling shall not be more than three to five inches deep, sugar would be obtained without difficulty. It has been ascertained, also, that the sugar from corn will not grain so readily as that from sugar-cane; and in some instances, it has remained more than a week after the boiling before the sugar was formed, and yet excellent sugar was made.

It should be particularly remembered, that the juice should be boiled as soon as separated from the stalk. It becomes acid very soon, and no sugar can be made if the juice be allowed to stand two or three hours before it is boiled. The juice will even spoil in the stalk before it is ground, if the stalks be cut off a few hours before grinding. It is necessary, then, that every part of the process should be done with the greatest despatch. The stalks should be brought to the mill as soon as cut, and ground immediately. The vessel for boiling ought to be properly filled in two hours grinding, and the process of boiling down should immediately commence, and be continued until completed.

Excellent syrup, superior to the best molasses, will be obtained by observing the above directions, and boiling five gallons of juice to one gallon.

The juice of the corn-stalk is very rich in sugar, when cultivated in the manner suggested. Tested by Beaume's sacharometer, the instrument used to measure the strength of syrups, the juice of the corn-stalk weighs 10 to 10¼ degrees, which is about the weight of the best cane in the West Indies, and is richer than the juice of the cane in Louisiana, which is seldom heavier than 8¼ degrees.

One gallon of juice will produce nearly 1¼ pounds of sugar; and one acre of good corn will yield, if carefully expressed, from 700 to 1000 gallons of juice.

From the South Carolinian.

I have but little information to add to the above article. My kettle holds eighty gallons, though a sixty gallon kettle might answer the purpose, but probably it would be best to procure a shallow vessel, as above recommended, for making sugar. I made three boilings before I made good syrup, not boiling down sufficiently the two first boilings. Prepare yourself with a skimmer, a gourd with a long handle will do, to remove the scum when it begins to boil, and for a short time after. Leave off skimming when you see the dark glutinous scum is pretty well removed. Also, prepare yourself with an iron ladle, with an iron handle attached to it about three feet long (which any blacksmith can make), perforated with small holes. Whoever attends the kettle must use this ladle in raising the juice with it, when likely to boil over. When the juice boils down considerably, you will see the bubbles begin to show and burst on the surface. When you see a few such bubbles, if it be your object to make syrup, I think then is the time to take it out; but if you wish the syrup to granulate, boil till the bubbles become general on the surface. You can also test it, by dipping out some syrup with a tablespoon, and when it cools sufficiently, by taking it between your thumb and forefinger; and if it inclines to rope, it is syrup, but if it will rope about an inch it will granulate. You can boil rapidly at the commencement, while the juice is thin, but as it thickens boil with more moderation. If you boil too rapidly after the bubbles begin to burst on the surface, you will certainly burn it, and it will give it a candy taste. If you cannot get lime conveniently, lye will answer the purpose. I should say, put in about half a pint of lye to every fifteen gallons of juice. Throw in the lye or whitewash made from the lime, immediately after you quit removing the glutinous scum. When you have boiled to satisfy yourself, take out the syrup and put it in some shallow vessel to cool. I am inclined to think, when the juice has been extracted from the stalks by a wood mill, that if they were chopped up and boiled in water, good vinegar could be made from them. I advise you to build a wood mill. The expense is trifling. You can get a mechanic in my neighborhood, who will build you one for twenty dollars, by furnishing him two assistant hands;

otherwise, send over a common mechanic, and after looking at mine, which is a good model, you can have one made at home. I advise you to plant your corn for experiment in bottom land (if not rich, make it rich by improvement), in drills, from four to six inches in the drill, and the drills from thirty to thirty-six inches wide. JAMES S. POPE.

Island Ford, Edgefield Dist., S. C., Feb., 1845.

WIRE FENCES.

WISHING to make three or four miles of the cheapest, most durable, and, at the same time, sufficiently substantial fence, I would like to ascertain from the editor and correspondents of the Agriculturist, the best and most economical plan of a wire fence. I want the exactest and most minute details as to the posts, size and manner of setting; distance from each other; the least size of the wire required for cattle and horses; the number of wires effectually to secure them and sheep (no hogs or geese to be taken into the account); the manner of running and securing them on to the posts, &c., &c. Price in the New York market of *galvanized* wire, or wire, so prepared as to prevent rust, and secure as near eternal duration as possible; weight of wire to the rod, &c, &c. An early and full answer is requested. L.

The only places where we have seen iron hurdle fences in the United States, are at Mr. Woolsey's, Hellgat Neck, N. Y., and at Mr. Cushing's, Watertown, Mass. These were imported at a considerabfe cost. We are of opinion, a good article, 4½ to 5 feet high, and sufficiently strong to resist cattle, may be made in this country for 20 cents per foot, running measure. Coat this with coal-gas tar, with a handful of slaked lime mixed in every gallon, and the fence would last a century or more. To answer every question of our correspondent as minutely as he seems to wish, would require half a dozen cuts and a long explanation. We should be glad to hear from any of our readers who can give us information in this matter, and if we must have fences we greatly prefer those of iron hurdles. They are elegant in their appearance, are seen only when close at hand, and in consequence of their great duration are much the cheapest in the end. They can also be taken up very easily, and replaced anywhere when wanted. It is the only fence which should be tolerated on a lawn or near a gentleman's house. When constructed with connected chain top, it is strong, light, graceful, and, to our eyes, highly ornamental.

CURIOUS FACTS IN GRAFTING.—I have just visited an orchard of Mr. Jeremiah Lambertson, Flushing, L. I., and was shown a small apple tree, into which in April, 1844, thirteen grafts of different kinds were inserted, all sweet, and all ripening about the same time, in the latter part of July. On one of the grafts of the strawberry variety, of about 20 inches growth, there had grown eight fine strawberry apples. The graft had two branches, on one of which six beautiful apples hung in one cluster, on the other there were two, each nearly as large as a hen's egg.

Mr. Lambertson promises to give you at some convenient time, a description of the tree above alluded to, its age, the names of the thirteen varieties of fruit, &c., for the benefit of the readers of the Agriculturist.

A. SHERMAN.

EIGHTEENTH ANNUAL SHOW AND FAIR OF THE AMERICAN INSTITUTE.

THE conducting of this anniversary celebration of the progress of a great nation in industry and the arts, has been confided by the Institute to the undersigned Managers.

The exhibition will be open to the public on Monday, the 6th day of October, 1845, at 12 o'clock M., at Niblo's Garden, Broadway, in the city of New York. Contributions from exhibiters will be received on Thursday, Friday, and Saturday of the previous week. To insure the most favorable locations, and the advantages of competition, the products of the manufacturer, mechanic, and artisan must be delivered and entered on the books of the Fair, on one of those days. The chance of a good location will be in favor of those who come the first and second day. Fruits, flowers, &c., form an exception. The proper time for entering them will be specified in the agricultural and horticultural circular, or notices hereafter to be issued.

Arrangements already made, and in progress, for carrying out the eighteenth celebration, are on a scale more extended and attractive than ever before; and if public favor towards this institution continues to extend and increase each year as it has during the last seventeen, means will be afforded of enlarging the value of the premiums, and thereby creating a more intense and universal competition. Several opulent and munificent individuals, desirous of making the exhibition worthy of our great emporium, and giving a fresh impulse to improvements in our country, have volunteered donations for the purpose; others have promised not only to contribute, but to use their influence to cause their friends to do the same. After reserving what discretion demands, to cover the annual current expenses of the institution, every dollar will be expended by the Managers to promote improvements in Agriculture and the Arts. It is the fixed policy of the Institute, to appropriate every dollar for the benefit of that public which has been its generous, unfailing patron.

There will be an opening address, followed by novel and interesting displays of the Pyrotechnic art.

On Thursday, the ninth day of October, a National Convention of Farmers and Gardeners, and Silk Culturists will be held. Circulars, with questions prepared, will be issued. Washington's Home Department of Agriculture, recommended by the Institute, and unanimously approved by a National Convention held last year, will again be urged. These precious interests demand extensive concert, unanimity and profound deliberation; and *the* TIME, during the great Fair—and *the* PLACE, the emporium of the western world, were, by the Convention of last year, decidedly resolved to be the best suited to accomplish the objects sought.

For the second week, has been assigned the show of cattle, horses, and other live stock, and the plowing and spading matches. Fine horses, combining size, strength, and fleetness, for wagon and carriage—healthy fat cattle and sheep, suitable for market—well trained, well matched, and powerful working cattle, and the best milch cows, will each and all command high premiums. To accommodate those interested in the cattle show, a beautiful plot of ground has been secured between Twenty-third and Twenty-fourth streets, near the intersection of Broadway and

the Fifth Avenue, with commodious rooms on the premises for accommodating the committees. The plowing and spading matches will be held in New York, or its vicinity. For particulars, see agricultural circular.

The anniversary and other addresses will also be delivered in the course of the second week. The horticultural exhibition of vegetables, fruits, flowers, &c., will be in Niblo's long promenade, and superintended by eminent horticulturists. Great varieties of rare seeds have been, the last year, scattered by the Institute over our country, with the express understanding, that a portion of their products be brought to the Fair, to swell the beauties of the display. The great saloon, and the second story of the north wing, will, as usual, be reserved for the fabrics of the factory and workshop; made of cotton, woollen, silk, and all the varieties of metals and other substances, the fruits of that genius and invention, which have commanded the admiration of the world. The first floor of the north wing of the saloon will be animated by moving machinery, propelled by our best model steam engines, to afford visible, practical evidence to all of their merits and value.

The best new and useful inventions will be objects of the highest honors. Also, establishments affording large varieties of specimens of well constructed agricultural and horticultural machines and implements; but in no case, for want of competition, or other cause, will any article be entitled to premium, if adjudged intrinsically not deserving particular commendation.

This first general appeal is made to our countrymen as a notice for preparation. Others more in detail will follow. Thousands and tens of thousands of ingenious and patriotic friends, we know, stand ready to contribute their utmost efforts to perfect and embellish every art, agreeable or useful to our Republic. Past experience convinces us, that on the coming occasion, American genius and industry, in all their numberless products, will show forth more conspicuously than ever. All classes of this great people are invited to think of our objects, and the effect of the countless specimens of new inventions and old ones improved—of improved fabrics of finer finish and lower prices, by processes unheard of before—all submitted to the examination, scrutiny, reflection, and discussion of hundreds of thousands of inquiring and enterprising freemen, for weeks, at seventeen successive anniversaries. By such means improvements must receive acceleration, and the comforts of life for the millions, multiplied, improved, and brought nearer the reach of all.

The Managers will do all that unbought zeal can do, to make this Eighteenth Celebration of American Industry and the Arts worthy of our great city, and honorable to the nation. Our most able and distinguished citizens will be invited to address the visiters on subjects embracing the solid welfare of the whole Union. To sustain our best public institutions, we have a willing population, that possess more original native capabilities for producing great results than has ever before been found on the globe; enjoying full liberty for the exertion of all their powers, both of body and intellect. By the cultivation of only one American staple, Christendom is supplied with a large proportion of her clothing. And our silk culture, if pursued with skill and confidence, may soon afford silk for as many more.

The steamboat, which is rapidly conveying knowledge, civilization, and the arts, into the remotest western prairies, and the most sterile African deserts, is emphatically a product of American genius and skill.

Let our whole people, with united zeal, energy and power, uphold and sustain all well devised means for advancing, perfecting, and perpetuating our industry, wealth, liberty, and glory.

Adoniram Chandler,	Edward Clark,
Edwd. T. Backhouse,	Robert Lovett,
John Campbell,	Gurdon J. Leeds,
Jas. Van Norden,	A. D. Frye,
H. W. Childs,	T. B. Stillman,
Joseph Curtis,	Joseph Cowdin,
Geo. Endicott,	Jas. J. Mapes,
Wm. Hall,	Geo. F. Barnard,
Joseph Torrey,	C. C. Haven,
Jas. R. Smith,	Chas. Mapes,
Martin E. Thompson,	Jonathan Dodge,
Isaac Fryer,	T. W. Harvey,
John D. Ward,	T. B. Wakeman,
	Managers.

Repository of the American Institute,
New York, July 2, 1845.

TO PURGE A HORSE QUICKLY.

When medicine is administered to a horse with his bowels in a *natural* state, or costive, it will not operate in less than twenty hours, and is frequently thirty to forty in doing so. When the horse's bowels are purging, medicine will act very rapidly; this arises from the great irritability of his bowels, and purging with him is always the *result* of inflammation. On the other hand, costiveness is the *cause* of inflammation. When there is *inflammation* of the *bowels in the horse*, purgative medicine should never be given. In nine cases out of ten, when *severe*, the medicine will be *fatal*. *Palliative* treatment, not *remedial*, is to be resorted to in cases of *inflammation*. When purges are to be used, this must be borne in mind. To the horse, *fasting* and thirsty, give one to two pounds of *Glauber* salts, with plenty of *warm* water, in which has been stirred some meal. In *three* or *four hours after*, give an injection, composed of three gallons of warm water, one quart of common cheap oil of any kind, or melted lard, one quart of molasses, and half a pound of salts, all well mixed up together. If the first injection does not produce purging, give a second. If the horse have *no inflammation*, give him exercise, if he has, avoid it carefully, and keep him cool.

A. Stevens.

Great Milkers.—I often read in various papers of what this and the other man's cow has done. I have a cow which has given for ten days in June, from 54½ to 63 lbs. of milk per day. She is one-fourth Durham. I have a pure bred Durham heifer, which gave for some time from 41 to 44 lbs. per day; and several others about the same.

I have for sale the pure blood Mackay pigs, and the Southdown sheep, and a very likely pure blood Durham bull, which I have had with my cows three seasons. I sell him in order to change, that I may not breed in and in.

Wm. Cushman.

New Braintree, Mass., July 14, 1845.

Agriculture in Scotland.—No. 10.

Farm of Mr. Cobb.—In resuming my observations upon the farming in the neighborhood of Dundee, commenced in my last, I may say that the farmers near that city are not, *generally*, so far advanced as those I have met in some other sections. They look with incredulity upon deep plowing, and when draining, many of them put the top of the stones only about one foot from the surface; thus, by their own act, rendering the use of a subsoil plow quite impossible. The most obstinate, however, are beginning to push forward, and there are some admirable examples for them in their own vicinity.

We visited the farm of Mr. Cobb, a few miles from Sir John Ogilvy's, and were much delighted by its excellent condition. This farm comprises about 500 acres, all arable, and the rotation is essentially the same as that of Sir John Ogilvy, mentioned in my last. He generally has two years of grass, however, unless he takes two oat crops, having every year about seventy acres of wheat, seventy of barley, seventy of turnips, seventy of potatoes, &c. When he takes two oat crops in succession, he has of course 140 acres of that grain. The system of management and sales is identical with that described in my last, as practised in that neighborhood. His grass crops, for instance, brought last year £12 per imperial acre, by roup or auction. The oats and barley are sold just as the leaf begins to fall, and all the risk after that is upon the purchaser. The seller thrashes the grain, and carts the straw when they demand it. He calculated that the grain crops also would bring him in from £10 to £12 per acre.

Mr. Cobb has been for several years busily employed in draining, and has completed a large portion of his farm. The drains are put in thirty-three inches deep, and thirty-six feet apart. He intends in future to have them three feet in depth, being fully convinced of the importance of giving the plants a deep, wholesome soil, into which they may extend their roots in search of food, and also that it is necessary to have the top of the stones or tiles so low as not to be touched by the subsoil plow. He is subsoiling one-seventh of his farm every year, to the depth of fifteen inches, and intends to go several inches deeper the next time, considering that the full benefit of the drain can only be brought out by the subsoil plow. He says that the expense of draining is repaid with him in from two to three years. Lest any of our incredulous farmers should shake their heads at this, I will inform them that Mr. Cobb is a tenant, and paying between £1200 and £1300, or nearly $6,000 per annum of rent, and is not likely to go on with improvements that do not actually repay him and give a fair profit. He commenced farming with forty acres, for which he paid £7. 10s., or nearly $40, per acre of rent, and has worked his own way upwards. We saw a piece of wild moor, that he brought in last year by trenching three feet deep, taking out the stones, and putting in drains. This operation costs £12 per acre. The first crop, one of oats, taken off that ground, actually brought at auction, £12 per acre, thus repaying the prime cost at once.

Farming in Forfarshire.—From Dundee we went northward thirty miles, to Brechin Castle, the seat of Lord Panmure, about half a mile from the town of Brechin. Lord Panmure is the owner of immense estates in that section of the country; and with a munificence for which he has long been remarkable, on the present occasion procured the services of Professor Johnston to deliver three lectures to the Eastern Forfarshire Agricultural Association. The three were delivered respectively, at Brechin, Montrose, and Arbroath. I attended only the first, at Brechin. The audience was large and attentive. In the evening a dinner was given by Lord Panmure, at which about eighty persons, chiefly his tenantry, were present. They were a remarkably intelligent body of men, and evidently much delighted by the information they had received from Professor Johnston. The farming in Forfarshire is fast becoming very good; tile works are being erected on almost every large estate, and the introduction of the pipe tile promises to cheapen the draining very materially. Many are putting in stones, but they do not generally break them fine enough, and often bring them up too near the surface. I much regretted that other engagements would not permit me to accept of invitations which I received to visit several of the best farms in the district.

There is a large manufactory near Brechin, for the manufacture of *arrow-root* and *tapioca*, from potatoes. We had not time to see the process. It reminded me of our manufactories of Havana cigars in Connecticut, and many like instances of Yankee genius.

The effect of Professor Johnson's visit in Forfarshire was excellent; the farmers got a thorough awakening, and will not slumber again. Lord Panmure and the other leading gentlemen are much engaged, and plans are already on foot for another and a longer visit. JOHN P. NORTON.

Edinburgh, June 1, 1845.

THE STRAWBERRY PLANT.

I YESTERDAY, for the first time, met with Mr. Downing's work on fruit. I doubt not it will be a work of great value. I discover from it, that I have erroneous opinions respecting the character of the strawberry plant. I was not, like Mr. Downing, "born in a large garden, on the banks of one of the noblest rivers in America," and therefore "claim a natural right to talk about fruit." But I have resided, for 41 years, on the banks of La Belle Riviere (the Ohio), at the then village of Cincinnati, now the Queen of the West, and destined in less than half a century, to be the second city in the Union. Thirty years of that time has been devoted in part to Horticulture, and I have paid particular attention to the character of the strawberry plant. If I am wrong, I am without excuse, and should pay for my error.

It seems, according to Mr. Downing, that all strawberries in their *natural* state, have blossoms perfect in both the male and female organs. Of course, all new seedlings have perfect blossoms. But it seems, in rich soils, a *few* of the runners will become defective in the male or female organs, and be unproductive. That perfect natural plants, of all the varieties, are abundant, and you have only to select your plants from these to have abundant crops, and not cumber your ground with staminate plants. My doctrine is, that in 10,000 seedlings, there would be about an equal quantity of male and female (staminate and pistillate) plants, and that it would be

a strange occurrence, should a single plant be found perfect in both organs. With the exception of the white and monthly varieties, I have met with one plant only, perfect in both organs. Its fruit is small. That even an acre of Hovey's fine seedlings, will not by themselves, produce a single perfect fruit. It is time this subject was settled, for if my impressions be true, though our Queen city may be second to New York in population, she will be the only city where strawberries can be sold at a price to bring them within the reach of the poor. No cultivator will be able to take 125 bushels in one day to her market. True, I did not go to the far West, *for poverty, I had a plenty of that in my native town.* Still, I feel a deep interest in the poor, and would risk something to bring this delicious fruit within their reach. I propose that Mr. Downing select a dozen perfect plants, from each of the twelve following varieties described in his work. Bishop, Grove End scarlet, Hudson, Large early scarlet, Methven scarlet, Black Prince, Brewer's Emperor, Elton, Hovey's seedling, Myatt's British Queen, Myatt's pine, and Myatt's Deptford pine. Most of these are new kinds, and never seen by me. Mr. Downing has seen them, and can the better judge. Let these be sent to Mr. Jackson, an intelligent horticulturist in the vicinity of Cincinnati, who will take a pleasure in making the experiment. Mr. Downing, if he wishes, can name another person to overlook the plants. These twelve varieties Mr. Jackson will plant 100 feet separate from each other. He will leave, when growing, one plant only of each. That plant may be increased by runners. For each variety that produces a full crop of perfect fruit, I will pay $50 to Mr. Downing, to be applied as he may wish. For each kind that does not produce a full crop of perfect fruit, he is to pay me $50, which I will apply to some public charity. Should the experiment cost me $600, I shall deserve it for my temerity and ignorance. Should it cost Mr. Downing that sum, a belief in my views, and a corresponding cultivation, will reduce the price of strawberries to 4 cents per quart. Should Mr. Downing not incline to accept this proposition, I trust the President of the Massachusetts Horticultural Society, will bring the subject before them, and have the question fully settled. Mr. Hovey deems his seedlings what Mr. Downing calls a natural plant, and uniform bearer. Yet I believe a different opinion prevails at the garden of Messrs. Hovey. Mr. Hyde, an intelligent horticulturist, in the vicinity of Boston, informed Mr. Ernst, when he was in Cincinnati, that when he bought Hovey's seedling at their nursery, he was told it would not bear, except in the vicinity of other varieties.

To induce market gardeners and others to make the experiment, I would state, that I have paid particular attention to this plant for 30 years. In the fields in this region, 50 years since, the plant was abundant. Barren patches were common in the field, but I was not then aware of the cause. Of late years, I have examined them. There are staminate plants so defective in the female organs, as never to bear even a defective berry. Others are so far perfect in both organs, as to produce a half crop of fruit. The pistillate plant is so defective in the male organs, as never, except impregnated by a plant near, to produce a perfect fruit. As a general rule, where the staminate plant produces any fruit, it is the richer of the two. For the better understanding of those ignorant of botany, I am in the habit of designating them as male and female. The strawberry belongs to the class of plants that has the male and female organs in the same blossom, and I have never seen a white or monthly variety in which both organs were not perfect. Of the scarlet, I have seen one variety, and one only, that is perfect in both organs; and every blossom produces a small, high-flavored perfect fruit, unless injured by late frosts. Neither the staminate nor pistillate plant, change their character by cultivation. The partially bearing staminate plant, will bear better some seasons than others, and, I doubt not, a greater portion of pistillate organs may be forced out than usual, by forcing in hot beds. It is this character of the strawberry plant, that renders botanists slow of belief. Yet, it should not, for the discovery is not of modern date. It was noticed by some of the disciples of Linnæus, and he scolded them for it, advising them to examine closely the plant before committing themselves, as he presumed the plants they called staminate and barren, were blossoms killed by the late frosts. Duhamel and all who have written expressly on this plant, since the days of Linnæus, have advanced the same doctrine, with the exception of Harper or Harvey,* who wrote the results of the London Horticultural Society's classification of the different strawberries cultivated in England. He is silent on the subject of staminate plants, and appears to have had as little practical knowledge of the character of the plant, as he had of the Hebrew psalter.

From the prairies of Iowa, I have twice had strawberry plants sent me, with the same result. There were both staminate and pistillate plants. The fruit of the latter was very small, and never produced a single berry, unless impregnated by other plants. The staminate plant, in favorable seasons, will perfect half its blossoms; in others, but few. The fruit is a light scarlet, and where it perfects but three or four berries to the plant, the fruit will measure upwards of 4 inches. If used for impregnation, it requires constant watching. It is of such vigorous growth, that if but one plant were planted to 50 pistillate plants, it will in two years root out the others. For 20 years, I kept patches of the staminate and pistillate Hudson strawberry, in separate departments, to set new beds from, so as to be certain not to have too many barren plants. Neither bed ever produced a single fruit, unless as a matter of curiosity, I placed a single plant of the latter by the former, when a certain portion were always impregnated, and bore perfect fruit. When, in blossom, the plants may be distinguished at the distance of 20 feet. Our market gardeners can distinguish them by the stem and leaf. In raising from seed, I have had about an equal quantity of staminate and pistillate plants. Not one in 50 of the former would produce a single berry. I have raised thousands in a single year, but I never raised one of what Mr. Downing calls a *natural* plant; not one in which both organs were perfect in the same blossom. I never saw a pistillate plant, separated from all others, bear a perfect fruit. Hovey's very superior seedling, by itself, as obtained by us, in the west, from his nursery, and from

* My memory does not serve me certainly of his name.

others, never bore a perfect fruit. I saw a like bed of it in this place, with many defective berries, but not a single perfect fruit. I have seen this the case on the banks of the Ohio, where there were one-and-a-half acres of this variety. The bed had been set out the fall previous, and a press of business had prevented the gardener from putting out male plants. Had he done so in the fall, even 1 to 20, they would have had possession of near half his ground. The elder, Mr. Prince, more than 20 years since, conversed with me on this subject. He was aware of the existence of barren plants, which he designated as blind plants, and the necessity of having one blind, to 10 or 12 bearing plants; but the blind plants so speedily rooted out the bearing vines, that he was impressed with the belief, that the bearing vines produced a portion of blind plants in running. In raising seedlings, it is a matter of great importance to be able to distinguish the staminate from the pistillate plant, before running; to cut them out, as they will before the plants are fruited, root most of the pistillate plants out. Is not Mr. Downing under a mistake in describing the Hudson as a *necked* fruit? This is one of our largest, best flavored, and most productive strawberries, where male plants are interspersed. I have known it well for 50 years, in New Jersey, Philadelphia, and Ohio, but never saw one with a neck. On the contrary, the stem and hull is so much imbedded in the fruit, that it is difficult to separate the fruit with the fingers. The strawberry cultivated in England under this name, and said to have been received from New York, is described as a *necked* fruit, and I presume Mr. Downing has taken the description from English works, and not personal observation. I wish to draw his attention to it, that he may correct the error, if he be in error; for where its *pistillate* character is understood, it is the most valuable to cultivate for market. In the spring of 1844, a single wild staminate plant was brought me, from a field in Kentucky. This spring, I sent it to our Horticultural Society, with 200 perfect fruit. Separate from staminate plants, it would not have produced even an imperfect berry.

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In justice to Mr. Downing's views, I should say, I have never met with an English or Scotch gardener who would even admit the existence of plants not producing a full crop of fruit, from a defect of organs. When I have in their own gardens pointed out ten staminate to one pistillate blossom, the former all barren, and the latter with perfect fruit, they gave a shrug of the shoulders—said, they had never before noticed the difference in the character of the blossom, and that no such difference existed in Europe. Mr. Buist, the intelligent horticulturist of Philadelphia, denied my principle, certainly so far as Kean's seedling was concerned, as it yearly never failed to produce a full crop of large fruit. He showed me a full bed, then opening its blossoms, which were all pistillate plants, and not the true Kean, which is a staminate plant, and so figured in their publications, and so seen by me at Mr. Cushing's. I told him they could not produce any perfect fruit. He assured me they had never failed. A few feet distant, I found another bed, in which nearly all were staminate plants, and which he told me was the Hudson. I pointed out to him in that bed, male plants, amply sufficient to impregnate all his Kean. He then observed, to be certain, he had planted a bed of them, separate from all others. These I examined, and we agreed to be bound by the result. He wrote me one month thereafter, that the fruit in the first bed shown me, was all perfect, whilst the separate bed had not a single perfect fruit.

I imported the same variety from England, under the name of Kean's seedling. It is a hardy vine, a great bearer, the fruit large and well flavored. It is a much more valuable variety, than the genuine staminate Kean, which produces a partial crop only, of large fine fruit; and a late English writer says it is now but little cultivated, being found unproductive. It is a valuable kind for forcing, but of little value for general culture.

Newark, N. J., July 10, 1845. N. LONGWORTH.

FARMING AND CROPS AT THE WEST.

You ask me for the results of my observations on agricultural matters, in my late trip to the West. My range of observation was limited in two respects: First, on account of the route, which was mostly by water, or through such parts of Illinois and Wisconsin as were but little settled; and second, the object of my excursion was so foreign from agricultural affairs, as to leave me but little time to make inquiries relating to them.

Our first permanent landing place, after leaving Lake Erie, was Chicago, which, in its rapid growth (already numbering some 10 or 12,000 inhabitants, although but 13 years ago it contained scarcely 100); its numerous large stores and houses, all well filled; its activity and the extent of its business, gives conclusive evidence of a flourishing agriculture in the country which is tributary to it. The trade with Chicago is purely agricultural, excepting some minor branches of the mechanic arts, and the slightly artificial stimulus afforded by the previous artificial expenditure on the Illinois and Michigan canal; which is again to be resumed this season, to be completed probably in the course of another year. The best indication of the highly favorable condition of the agriculture of northern Illinois, is perhaps to be learned from the prosperity of its capital; as the country which now contributes to build up and sustain it was but a wilderness, while Chicago was only an Indian trading post.

While there, I frequently had the pleasure of meeting our friend, Mr. Wright, the zealous and indefatigable editor of the Prairie Farmer, from whom I was pleased to learn that his paper is gaining rapidly in circulation, and doing much good by introducing and sustaining modern views and improvements in the science and practice of agriculture.

We made an excursion of some 80 miles into the interior, passing down on the west side of the Des Plaines river, and crossing over at Lockport; thence on to Joliet (as it ought to be written in honor of the devoted old French Jesuit who made it his missionary home among the savages, 100 years ago); and from thence along Hickory Creek, the Yankee settlement, and northeastwardly to Chicago. Much of this route was sparsely settled and indifferently enough farmed; and much of it was thickly studded with houses and farm buildings, and under a good (*western sort of*) cultivation. The cattle had all their new coats on, and looked well, for Illinois everywhere produces a good kind of natural grass, in tolerable profusion, the

evidence of its quality being manifest in the thriving condition of the animals. Of the cultivated grass we saw little that were good, owing perhaps partially to frost and drought, of which they have had their share this season; and, probably, in part to indifferent cultivation. The precise excellence and duration of artificial meadows, has probably not yet been fully tested in the prairie region; but the appearance of much of the soil, on a cursory examination, would not seem to be so well adapted to their perfection and permanence, as in the forest land of north-eastern Wisconsin.

The farmers complain much of the stunted growth of their orchards. Many of them say, their trees flourish well at first, but after three or four years of tolerable growth, they appear to be almost stationary, and yield indifferent returns for the attention bestowed upon them. I hope at some future time to see this opinion contradicted by occular demonstration.

Corn, spring wheat and oats, are the principal crops in the region through which we passed. Of these, the returns average about 30 bushels of corn, 15 of wheat, and 30 of oats, per acre, taking the seasons together. The raising of winter wheat is almost abandoned in some districts, owing to winter-killing and rust, though farther in the interior large quantities of it are raised, in connection, to a greater or less extent, with spring wheat. The last is usually sent to market mixed with the winter grain, and so almost universal is the practice, that Chicago wheat sells from 2 to 5 cents per bushel lower than Wisconsin wheat raised within 50 miles of it. The Wisconsin wheat, indeed, stands on the highest ground now, as to quality and price, being fully on a par with the Milan, and the choicest specimens of Ohio grain. This is said to be owing to the greater proportion of winter wheat, for which their soil is eminently adapted; to the superior kinds which are cultivated; and to the greater care and attention bestowed by the farmers of that Territory.

Sheep husbandry is rapidly gaining favor among the farmers of Illinois, and Wisconsin, and increasing thousands of these useful animals are annually getting a foothold in the prairies, to swell the future gains of their enterprising owners. Much loss has been hitherto sustained in their first introduction on the prairies; and so far as I can learn, the most of it has occurred from excessive mismanagement and neglect. The sheep are usually purchased in Western New York, Pennsylvania, and the interior of Ohio, and entirely unaccustomed to it as they have been, are driven in dense masses from 400 to 500 miles during the heat and dust of summer, and the storms and mud of autumn, to a dreary home; not in one instance out of ten, properly provided with food and shelter or accommodations. Disease and mortality rapidly ensue, the poor sheep paying with his life, and the owner with his purse, the penalty of his gross improvidence and neglect. Sheep ought to be driven in small flocks, over good roads, before July or after August; and if a sufficient quantity of grass is not to be found on the way side, they should be supplied with it, to the full extent of their wants, in the fields on this route. A covered wagon should accompany each flock, to pick up the disabled sheep, and afford them sufficient rest till they have recruited their strength; and every care and attention which humanity or *interest* can suggest for their health and comfort, should be bestowed upon them, on their exhausting journey. When they arrive at their destination, good shelters, good food, and good shepherds, should be abundantly supplied to them. This would be necessary if indigenous to the country; how much more so, when they have just undergone a campaign, to which neither they nor their race have been accustomed!

Sheep cannot be kept on the prairies without much care, artificial food, and proper attention; and, in a false system of economy hitherto attempted by many, losses have occurred from disease and mortality in the flocks, sufficient to have made ample provision for the comfort and security of ten times the number saved. More especially do they require proper food and attention, after the first severe frosts set in, which wither and kill the natural grasses. By nibbling at the *fog* (the frost bitten, dead grass), they are inevitably subject to constipation, which a bountiful supply of roots, sulphur, &c., are alone sufficient to remove. Roots, grain, and good hay, straw, or corn stalks, pea or bean vines, are absolutely essential to the preservation of their health and thrift during the winter, any where north of 40° or 41°. In summer, the natural herbage is sufficient to sustain them in fine condition till they shall have acquired a denser population of animals, when I think it will be found necessary to stock their meadows with the best varieties of artificial grasses.

The prairies seem adapted to the usual varieties of sheep introduced into the United States; and of such are the flocks made up, according to the taste or judgment of the owners. Shepherd dogs are invaluable to the owners of flocks, both as preventives against the small prairie wolf, which prowls around the flock, but which are rapidly thinning off by the settlers; and also as assistants to the shepherds in driving and herding their flocks on the open ground.

We were told on our return to Chicago, that we had not seen the best portion of their state, which we could readily enough credit; the choicest specimens lying still farther south and west. *Ever west*, to the migratory hordes of the east, lies the El Dorado of their hopes; and we have lately seen, that from the remotest western verge of Missouri, thousands are seeking it on the shores of the Pacific; and the Celestial Empire may soon be destined to become the theatre of Yankee enterprise and ambition, in their resistless course towards the setting sun.

Our next course was by steamboat to Sheboygan, where we chartered horses for an inland trip through the woods on horseback to Manitouwoc, Green Bay, and Lake Winnebago; a part of which route only had we time to accomplish. This portion of Wisconsin is a wooded country, the forest extending from Lake Michigan to Green Bay, the lower Fox River, and the northern half of the eastern shore of Winnebago, where the beautiful undulating prairie sets in, and gradually approximating to the western shore of Michigan, extends with its countless groves and variegated woodland, to the Mississippi and beyond. Manitouwoc is beautifully situated at the mouth of a river of the same name, which rises within three miles of Winnebago, and flowing through a rich limestone country of gently rolling surface, and after furnishing some of the best mill sites in Wisconsin, many of which are improved for mills of various kinds, including some tanneries, it flows into Lake Michigan, for which its ample volume and direct course into the

lake form the best natural harbor to be found on its western shore. A large share of the timber is rock or sugar maple, hickory, beech, oak, poplar, elm, linden, and many beautiful groves of pines; the latter reaching from 80 to 150 feet in height. The soil is eminently adapted to every species of agriculture, wheat, and all the cereal grains, grass, roots, &c., &c. The more open prairie country on the south has received a large share of the emigration, hitherto; but as the choicest lands have already been taken there, these emigrants are gradually wending their way northward; and settlements are fast forming throughout the forests, hitherto unreclaimed since the flood, except by occasional patches of the Indian cornfields, which are now grown up to young poplars. Many of the settlers on the open lands farther south, having become wearied of the monotony of prairie life, or doubting their permanent fertility, have abandoned those natural meadows, and sought their homes among the woods at the north, where they are surrounded by the dense forests, or more open woodlands, which are more in harmony with their early associations, and the general character of American scenery.

Governors Tallmadge and Doty are settled near Lake Winnebago, about 35 miles west of Manitouwoc, and after the busy scenes of a political career, in which few have been more active or conspicuous, have retired to those peaceful occupations of rural life, where refined and cultivated taste must ever find its purest enjoyments.

The great number of pure streams furnished by innumerable springs, which everywhere yield water power in abundance, the varied surface and fertile soil, the perfect healthfulness of the climate, together with its proximity to the daily steamboat route on the great lakes, must soon render the country around Manitouwoc, among the most densely populated regions of the great west.

Returning to Cleveland, we made an excursion of some 60 miles in the interior. But this is now an old settled country, and already nearly filled; and being familiarly known, description would be superfluous. But "the oldest inhabitant" has probably never before seen the northern third of Ohio, including nearly all the Western Reserve, in so sad a plight as it exhibits this season. Nearly all the fruits are destroyed; apples, peaches, pears, and plums, by the late severe frosts; and from the same cause, accompanied by an almost unprecedented drought, the wheat, oats, and grass, will hardly pay for harvesting. Great suffering must be experienced among the stock, unless a prolonged autumn and mild winter tempers the severity of the early harvests. In the best wheat counties of northern Ohio, wheat now brings the price at the lake ports, with the addition of carriage to the interior. Happily, other parts of the west and south teem with abundant harvests, which effectually remove all apprehensions of suffering to the inhabitants.

Ohio, and the whole west, seem in the most healthy state of progression, and are fast approximating to that state of improvement and prosperity, which characterize their elder sisters at the east. Intelligence, industry, economy, and *anti-repudiation*, with the gradual introduction of domestic manufactures, will be sufficient to place them, ere long, at the summit of every reasonably ambitious aspiration.

Buffalo, July 8, 1845. R. L. A.

THE CHICASAW PLUM TREE.

PRUNUS CHICASA, Torry and Gray; PRUNIER DES CHICASAS, of the French; CHICASA PFLAUMENBAUM, of the Germans.

FIG. 61.

The Chicasaw plum tree, in its natural state, is a thorny shrub, growing from three to six feet in height, and when cultivated, to more than double that elevation. It is indigenous to Arkansas, Western Louisiana, and Texas, and is naturalized east of the Mississippi, as far north as Virginia. According to Michaux, it was brought to the Atlantic Southern States, and cultivated by the Chicasaw Indians; and hence it is commonly called the *Chicasaw plum*. It was introduced into Britain in 1806, and plants of it are growing in many of the European collections, as well as in American gardens and nurseries.

There is a tree of this species on the estate of Rev. E. M. Johnson, of Brooklyn, New York, which has attained a height of about twenty feet, with a trunk ten inches in diameter, is perfectly hardy, and matures its fruit every year.

The flowers of the Chicasaw plum, which put forth in April and May, are succeeded by a yellow, or yellowish-red fruit, nearly destitute of bloom, of a roundish form, half an inch or more in diameter, having a thin skin, a tender pulp, and is usually of an agreeeble flavor; but, like all the species of the genus, it varies in its quality, sometimes being quite astringent and sour. This tree may be propagated from seed, by grafting, or inoculation, in a similar manner as the common plum. D'JAY BROWNE.

New York, July 12, 1845.

SOLICITING SUBSCRIPTIONS FOR AGRICULTURAL PAPERS.—On this subject one of our travelling agents thus graphically writes us: A few things I have learned since I commenced asking subscriptions for your paper. First, not to call at a house where I see the fences, bars, and gates prostrate; barns and sheds wanting repairs; cattle standing about the house and way-side; wood-pile wanting; and glass broken from the windows. However good the soil, or rich the owner may be in acres, I am sure he is too sluggish and slovenly to read, or care to know much that does not comport with his notions of personal ease.

Secondly—If I chance to be deceived in the outside, and knock for admittance, not to urge the necessity and advantage of useful reading in a family, if, upon entering, I find the house in extra disorder—the mistress of it ordering one child to sit down, another to stand along, or clean that chair, and let the gentleman sit down; or the water-pail, the broom, and mop in the same corner; or the woman with uncombed head, gown gaping open, shoes slip-shod, or an apron over her shoulders, instead of being in its proper place; or if, upon addressing the master of the house, the wife answers first positively.

Thirdly—I never go in where I find a parcel of rubbish, or tubs and pails, or sundry other things about the front door-yard. As a general thing, where the garden is uncultivated the mind is also, and if there is not a taste for neatness and economy about the house and yard, there is none for improvement in knowledge and wisdom.

Fourthly—Here and there we find one who is tired of being asked to subscribe; who will shut the door rather hard and unceremoniously in your face, with a broad, "No—I don't want any of your papers;" or the maid being instructed says, "The lady isn't at home; or, in going to carry your address, only steps behind the next door, and returns saying, "The lady is engaged, and can't attend to looking at the paper; perhaps you may call again," &c., &c.

TIMBER MEASURING.

The usual mode of measuring round timber is to take the girth of a regularly tapering tree in the middle, and consider it as its mean girth throughout; then to call one-fourth of this girth the side of the log when squared; a deduction of one-twelfth or often one-tenth of the whole girth is sometimes made as an allowance for the thickness of the bark; then one-fourth of the girth in inches, is multiplied by itself, and the product by the length of the log in feet, and the last product is then divided by 144, the result of which is presumed to be the cubic contents of the log when squared, in feet. But it is no such thing. Although it is no easy matter to do away with an old and established, though erroneous custom, it may be well to show in a distinct manner, how these errors may be avoided, and put it in the power of both the buyer and the seller to adopt the true method at their pleasure.

Let us take, for instance, a round log of timber 60 feet long, 54 inches in girth at one end, 18 inches at the other, and 36 inches in the middle. Now, by the usual method, one-fourth of 36 is 9, which, multiplied by itself, gives 81; this multiplied by 60 gives 4860, which divided by 144, gives 33¾ feet, the presumed contents of the log when squared. This method may be illustrated by the adjoining figure, the shadowed segments of which, show the parts that would be cut off by the axe in squaring, and is obviously to the advantage of the seller; for the four triangles occasioned by the deficiency of the squaring, are included and paid for. And, besides, the buyer often sustains another loss by an excess of bark, or by the saw-dust, when the log is converted into joists or scantlings.

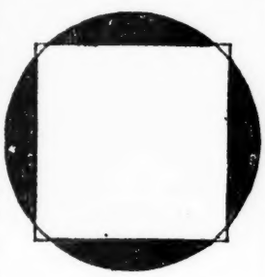

Fig. 62.

Every tapering tree is the frustrum of a cone, whether it tapers more or less; and if squared, it is the frustrum of a pyramid. Now, what mathematician would think of taking the middle of the frustrum of a cone or that of a pyramid, and calling it its mean girth or mean area? The great difficulty, in practice, in determining the true contents, of either of these figures, is for the want of an easy and concise rule. For a substitute, I will offer the following, which will apply equally true to all regularly tapering bodies, whether their ends be round, square, triangular, or any other figure:—

To the area of each end of the body, add four times the area of its middle; multiply the sum by one-sixth of its length, and the product will be the true contents.

In practice, every stick of timber should either be estimated as a regular four-sided prism, or as the frustrum of a pyramid; and in order to know the greatest square that can be formed out of a circle of a given diameter or girth, observe the following rule:

Multiply the diameter by the decimal .7071, or the girth by .2251, and either of the products will be the side of the stick when squared.

Example. What is the greatest quantity of square timber, in one stick, that can be hewn out of a log 60 feet long, 4½ feet in girth at one end, 1½ feet at the other, and 3 feet in the middle? The girth 4.5 feet multiplied by .2251 gives 1.01295, the dimensions of the sides in feet and decimals at the largest end; this number multiplied by itself gives 1.026 feet, the area of the largest end. The girth 1.5 multiplied by .2251 gives .33765, the dimensions of the sides in the decimal of a foot, at the smallest end; this number multiplied by itself gives .114 of a foot, the area of the smallest end. The girth 3 feet multiplied by .2251 gives .6753, the dimensions of the sides in the decimal of a foot, in the middle; this number multiplied by itself gives .456 of a foot, the transverse area of the log in the middle. The area of the middle multiplied by 4 gives 1.824, which being added to .114 and 1.026 is equal to 2.964; this number multiplied by one-sixth of the length of the log gives 29.64 feet, the cubic contents sought. It will be observed, that a log of the same dimensions as the above, estimated by the usual method, will contain 33¾ cubic feet, which is 4·11 feet in favor of the seller.

In determining the length of the side of a stick of timber to be cut out of a round log, two decimal figures will be sufficiently near to multiply by, for practice, which will render the operation much less tedious.

New York, July 4, 1845. B.

STILL-SLOP FEED INCREASES THE GROWTH OF WOOL.

I am in the midst of sheep-shearing—later than I ever sheared before. My still-slop flock are turning out better fleeces than I ever before sheared. One ewe's fleece, of good fine wool, weighed 5 lbs., and several, 4½ lbs., and one yearling, 3½ lbs. I have not yet sheared my bucks, some of which will turn out 9 or 10 lbs. of good wool. The flock fed on still-slops this year, fell short in their previous shearing

of an average of 2¼ lbs. We think they will now average 3¼ lbs. this year, making a gain of about 1lb. per head; a result so satisfactory, that I shall follow it up as long as I can have convenient access to the slops. I apprehended that the effect of making my ewes so fat would be destructive to the lambs. On the contrary, though the lambs were rather small, they have thriven wonderfully. The ewes having great abundance of milk, the lambs have the full benefit of it. The difference in the weight of the fleeces will more than pay all extra expense and trouble in procuring the slops. I have had no loss in wintering, and have a superior lot of lambs.

E. KIRBY.

Brownville, N. Y., June 15, 1845.

WASTE MANURES.

I AM much surprised to see so much waste of manures as there is amongst the middling class of farmers, in almost all parts of the country. Instead of so constructing barn yards as to hold the urine and the juices of manure, or making small drains to conduct and spread it over a large surface of land, in many places it is allowed to run into the ditch by the road side, and thence be conducted into the brooks near by. Now I am fully in the faith that small brooks and springs, or water from the road during rain storms or showers, conducted by small ditches along the high ground upon almost any soil, especially in the summer season, where land generally begins to dry, and upon dry sandy or gravelly soil at all seasons of the year, would double the crop of grass. I remember once seeing the effects of pure water spread upon a side hill, by means of troughs from a cistern, at the house of a gentleman who had proved the worth of barn-yard waste, as he called it, also from turning a small brook over his mowing land in dry weather. He brought water from a spring to his house, back of which the land was poor, and descending from it. He built a large cistern to contain the surplus water, which when full would let out and conduct it by means of small troughs over this side hill land, and in one season more than doubled his crop; and after one or two seasons cut as much grass as could well be dried on the ground. Almost all farms have small vales where water runs at least some part of the season, which might be conducted along higher ground to good advantage. I wish any man who can, would just try the experiment.

Another very profitable and cheap way of manuring dry, worn-out lands is, to sow clover, and plow in a green crop. I have seen poor pine plain land brought up in this way. Clover may be made to take root and to grow in almost any dry soil by putting on with the seed a few bushels of house ashes, plaster, or lime. Leached ashes will have the same effect, only put on more of them. A mixture of leeched ashes and lime or plaster operates well. I once sowed a piece of sandy land in this way, with southern, or early clover, as it is called—put on about ten bushels of house ashes per acre. The first growth of clover I cut in June, and the second when well gone to seed I turned under and rolled down smooth, dragged it with a light harrow, put on more grass seed and rye, and again rolled the field smooth. The next crop was as heavy as could well be dried on the ground. Wet or clay soil should not be rolled unless when dry and lumpy.

Another fault may be found with farmers generally. They do not put on grass seed enough. If the land is poor the grass will not spread to cover the ground unless the seed is put on thick; and again, if the land is rich and the quantity of seed on the ground small, the grass must be coarse and of bad quality; whereas, if you put on plenty of seed, your grass will be fine and of good quality, and worth one-third more than the coarse. Wet or clay soils when plowed should be manured with coarse manure, such as straw, corn-stalks, and litter from horse-barns. I have seen whole straw dropped straightways in the furrow by a boy who followed the plow, which had a wonderful effect upon the after crops, lasting much longer than finer manure. Indeed I am of the opinion that one ton of straw will do more good in this way upon heavy ground, than one and a half tons when rotted or made into compost.

Moist grass lands may be best improved by spreading fine compost upon the grass—what I call giving my grass land a top dressing. I have in this way, with about ten loads per acre, more than doubled my grass crop upon my moist lands; and again, by putting up small temporary barns that will hold about 4 tons of hay, and manuring them every two years, have, by feeding to sheep over the field, or by carrying it a great distance from the barn, especially on poor knolls and side hills, near the top, found benefit. I am careful to take up all manure left near the barn, and carry it off in the spring. I think that the urine from my sheep is worth nearly as much to my land as the manure. I cannot account for the rapid improvement in my grass in any other way, as 4 tons of hay fed out in my yard will not make more than 4 loads of good manure; which will not go one quarter as far over the same ground that my sheep make good every year. E. P.

Morristown, N. J.

A PRODUCTIVE COW.

I HAVE a cow, now eleven years old, that calved about the middle of January. The calf I fattened in the following manner: The first week, gave it one teat of the cow; the second, gave it two; the third, and after, not quite three. I sold the calf for almost $6; selling milk in the mean time to the amount of $1 75; and since that time I have realized between $14 and $15 for milk sold, besides what I used in my own family, consisting of eight persons, making the income from my cow, thus far, nearly $23. Milk is worth four cents a quart. The cow is fat, and messed every day.

Query—as this cow yields the profit of two ordinary ones, is it not the better way for all farmers to keep fewer cows, and *keep those few better*. It costs only one-eighth, or one-quarter more to keep a cow fat, than what will just keep one in passing order, such as the majority will average.

Young cattle, too, if well kept, and not allowed to fall away in winter, will be as heavy at three years old, as those kept in the ordinary manner at four years old. Now there is a saving of one year's feed, and interest on the value of the animal. The only question to settle now is, which costs most, the little extra care and feed, or one year's keeping and use of money the animal would bring, and insurance on its life. T.

Hackensack, N. J.

ANSWERS TO SHEEP INQUIRIES.

In your May number, you propounded several inquiries in regard to sheep, to be answered by such of your readers or others as are owners of good sheep. The answers are intended for the general good. I read your excellent journal with great interest, for the *honest-straightforwardness* of its articles. No journal in the land has sown broad-cast over it so many able and valuable articles on Sheep Husbandry as yours, and I am happy to see it pursuing the "even tenor of its way." Some of your readers in Vermont, last year felt that much of the language of Examiner was badly chosen, and disapproved of his attack, upon men who had done nothing to offend him. I was of that number. But Examiner's papers, however unjust to some, and severe upon others they may have been, will be the means of bringing to light the interesting and important fact, that there are a few small flocks in the country of *pure breed Merino sheep*, which have escaped deterioration by crossing with inferior races. The cold north has an interest in knowing this truth, which is of great moment to her pecuniary concerns; and the whole country has an interest in knowing it. The light-fleeced system must be abandoned if we would prosper, and we must return to the strong constitutioned and hardy, heavy-wooled Merino. I thank Examiner, then, for his papers, in which were much truth and much error, and many statements which must be received with many grains of allowance. I hold not the editor of the Agriculturist at all responsible for them. They are the errors of an honest, earnest writer, I doubt not, and you have too much magnanimity to be offended at my honest statement of my impressions. I have occupied the editorial tripod myself, in a city print, and I know something of the trials and discomforts of an editor, when he is blamed for that which he has not done; and I can truly say, that I have admired the high-minded course of your journal. Excuse this digression. I will answer your inquiries without naming them, by simply referring to their numbers.

1. I am the owner of more than 200 *pure full blood Merino sheep*. They are nearly equally divided between Guadaloupes and Paulars—the last so called. But I doubt whether there is a pure Paular in the Union. Those called Paulars in this part of the country are probably crosses of the Spanish races imported by Consul Jarvis and Mr. Livingston. Thirty-three of these last named, with their lambs, are pure Paulars, if there are any in the country. They were purchased of J. J. Bailey, Esq., of Newport, R. I., who says that they were of a race imported by Jarvis and Cuff, and shipped to Rhode-Island by Capt. James De Wolf, late of Bristol; that they were taken from the ship to the farm on which he now resides, and that they have never been crossed with any other race. Their form, shape, size, &c., make them appear very much like the pure Guadaloupe; but an examination of their wool, shows them to be a distinct and different Spanish race. They bear strong external and internal evidence of being pure Spanish sheep; and perhaps they may be what they are said to be—pure Paulars. Be that as it may, they are very extraordinary sheep. The Guadaloupes are a very handsome, long woolled, hardy, large sized sheep, more active and less docile than the Paulars, but of greater strength than any sheep I have ever seen. It takes a *man* to handle them They are, however, perfectly quiet in pasture. They are sheep of surpassing excellence, imported by Mr. Livingston.

2. Of the change produced by acclimation and breeding in this country, I cannot speak with much confidence. I feel assured, however, that we have improved upon the Spaniards, and that no Spanish sheep can be compared to ours without suffering in the comparison. At present, all the sheep I have are remarkable for constitution, strength, size, clean wool, long staple, and heavy fleeces. It is wool; not gum, yolk, oil, or dirt—but wool, that my sheep yield. It is as clean as can be found anywhere; soft, fine, and glossy. I should like to have you examine it. I think you would pronounce it of a most desirable grade, and very profitable to growers and manufacturers.

3. My sheep are fed on grass in summer, and hay in winter, with but little besides. I take care, however, to have the best of hay, cut when rather green, with as little sun as possible—but well cured; *and always fed out under sheds, well fitted with racks* for sheep. I strive to have all my sheep under cover all winter, except in the most pleasant weather. Many have expressed their surprise at the number I keep on the hay I feed out, and at the good condition they are always in. The secret is told above.

4. My sheep bring their first lambs at 2 and 3 years old, and will rear 95 per cent. or more, of all the lambs yeaned. I wean them first of September.

5. No full bloods are killed for mutton.

6. My sheep averaged 5 lbs. and nearly 1 oz., each. Of the 207 fleeces, weighing in all 1,044 lbs., more than one-half were taken from yearlings. All my sheep were very thoroughly washed—90 ewes have lambs by their sides. If I were to classify my sheep, the shearing might be stated as follows:

3	Ewes sheared	7 lbs.	and upwards	each.
12	" from	6 to 7	"	"
46	" "	5 to 6	"	"
88	" "	4 to 5	"	"
33	" "	3½ to 4	"	"

The balance went between 3 and 3½ lbs. Considering that more than half were yearlings, kept without a particle of grain, I think the average yield a large one. The shearers said it was the cleanest wool they ever sheared.

My stock bucks sheared as follows:

1	yearling Paular,	10 lbs.	8 oz.
1	" "	8 lbs.	10 oz.
1	" Guadaloupe	7 lbs.	4 oz.
1	two-year old "	8 lbs.	8 oz.
1	" Paular	8 lbs.	8 oz.

All these sheep were washed in a swiftly running stream, in the most thorough manner. They were sheared in the middle of a sunny day, and weighed in the presence of a barn full of neighbors. The first buck fleece named is very extraordinary. The sheep was 14 months and 8 days old when he was shorn; and the first part of the last winter he did not do well at all. He yielded this fleece without extra keep, and had no grain till near the close of winter.

7. Wool unsold as yet.

8. My sheep consume about the least amount of feed I ever knew any to consume—easily kept.

9. No diseases have ever been in the flock.

Thus I have gone through with your inquiries.

My sheep sell readily for $10 to $50 each. I have been offered $100 for the first-named yearling buck, and $50 for the second-named. My Guadaloupes came from Enfield and Lebanon, New Hampshire. A part of my heaviest woolled sheep came from Merrill Bingham's flock of Cornwall, the heaviest ewes being from his; a part from the Cutting flock in Shoreham; a part from M. W. C. Wright's flock, same place; and a part from A. L. Bingham's flock, Cornwall. L. C. BINGHAM.

Williston, Vt., July 14, 1845.

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We are much obliged to our correspondent for his clear and direct answers to our inquiries, and hope others now will be tempted to follow his good example. He certainly has a most extraordinary flock of sheep. We have samples of wool of Mr. Merrill Bingham's flock alluded to above, which are very fine of their kind, soft in their staple and uncommonly long.

CULTURE OF RICE IN THE PHILIPPINE ISLANDS.

RICE is, perhaps, of their agricultural products, the article upon which the inhabitants of the Philippine Islands most depend for food and profit; of this they have several different varieties, which the natives distinguish by their size and the shape of the grain: the birnambang, lamuyo, malagequit, bontot-cabayo, dumali, quinanda, bolohan, and tangi. The three first are aquatic; the five latter upland varieties. They each have their peculiar uses. The dumali is the early variety; it ripens in three months from planting, from which circumstance it derives its name: it is raised exclusively on the uplands. Although much esteemed, it is not extensively cultivated, as the birds and insects destroy a large part of the crop.

The malagequit is very much prized, and used for making sweet and fancy dishes; it becomes exceedingly glutinous, for which reason it is used in making whitewash, which it is said to cause to become of a brilliant white, and to withstand the weather. This variety is not, however, believed to be wholesome. There is also a variety of this last species which is used as food for horses, and supposed to be a remedy and preventive against worms.

The rice grounds or fields are laid out in squares, and surrounded by embankments, to retain the water of the rains or streams. After the rains have fallen in sufficient quantities to saturate the ground, a seed-bed is generally planted in one corner of the field, in which the rice is sown broadcast, about the month of June. The heavy rains take place in August, when the fields are plowed, and are soon filled with water. The young plants are about this time taken from the seed-bed, their tops and roots trimmed, and then planted in the field by making holes in the ground with the fingers and placing four or five sprouts in each of them; in this tedious labor the poor women are employed, whilst the males are lounging in their houses or in the shade of the trees.

The harvest for the aquatic rice begins in December. It is reaped with small sickles, peculiar to the country, called yatap; to the back of these a small stick is fastened, by which they are held, and the stalk is forced upon it and cut. The spikes of rice are cut with this implement, one by one. In this operation, men, women, and children all take part.

The upland rice requires much more care and labor in its cultivation. The land must be plowed three or four times, and all the turf and lumps well broken up by the harrow.

During its growth it requires to be weeded two or three times, to keep the weeds from choking the crop. The seed is sown broadcast in May. This kind of rice is harvested in November, and to collect the crop is still more tedious than in the other case, for it is always gathered earlier, and never reaped, in consequence of the grain not adhering to the ear. If it were gathered in any other way, the loss by transportation on the backs of buffaloes and horses, without any covering to the sheaf, would be so great as to dissipate a great portion of the crop.

It appears almost incredible that any people can remain in ignorance of a way of preventing so extravagant and wasteful a mode of harvesting. The government has been requested to prohibit it on account of the great expense it gives rise to; but whether any steps have ever been taken in the matter I did not learn. It is said that not unfrequently a third part of the crop is lost, in consequence of the scarcity of laborers; while those who are disengaged will refuse to work, unless they receive one-third, and even one-half of the crop, to be delivered free of expense at their houses. This the planters are often obliged to give, or lose the whole crop. Nay, unless the harvest is a good one, reapers are very unwilling to engage to take it even on these terms, and the entire crop is lost. The laborers, during the time of harvest, are supported by the planter, who is during that time exposed to great vexation, if not losses. The reapers are for the most part composed of the idle and vicious part of the population, who go abroad over the country to engage themselves in this employment, which affords a livelihood to the poorer classes; for the different periods at which the varieties of rice are planted and harvested, gives them work during a large portion of the year.

After the rice is harvested, there are different modes of treating it. Some of the proprietors take it home, where it is thrown into heaps, and left until it is desirable to separate it from the straw, when it is trodden out by men and women with their bare feet. For this operation, they usually receive another fifth of the rice.

Others stack it in a wet and green state, which subjects it to heat, from which cause the grain contracts a dark color, and an unpleasant taste and smell. The natives, however, impute these defects to the wetness of the season.

The crop of both the low and upland rice, is usually from thirty to fifty for one: this is on old land; but on that which is newly cleared, or which has never been cultivated, the yield is far beyond this. In some soils of the latter description, it is said that for a chupa (seven cubic inches) planted, the yield has been a caban. The former is the two-hundred-and-eighth part of the latter. This is not the only advantage gained in planting rich lands, but the saving of labor is equally great; for all that is required is to make a hole with the fingers, and place three or four grains in it. The upland rice requires but little water, and is never irrigated.

The cultivator in the Philippine Islands is always enabled to secure plenty of manure; for vegetation is so luxuriant that by pulling the weeds and laying

them with earth, a good stock is quickly obtained with which to cover his fields. Thus, although the growth is so rank as to cause him labor, yet in this hot climate its decay is equally rapid, which tends to make his labors more successful.

The rice-stacks form a picturesque object on the field; they are generally placed around or near a growth of bamboo, whose tall, graceful, and feathery outline is of itself a beautiful object, but connected as it is often seen with the returns of the harvest, it furnishes an additional source of gratification.

Stacking Rice, Luzon.—Fig. 63.

The different kinds of rice, and especially the upland, would no doubt be an acquisition to our country. At the time we were at Manilla, it was not thought feasible to pack it, for it had just been reaped, and was so green that it would not have kept. Although rice is a very prolific crop, yet it is subject to many casualties, from the locusts and other insects that devour it; the drought at other times affects it, particularly the aquatic varieties. There is a use to which the rice is applied here, which was new to us, namely, as a substitute for razors; by using two grains of it between the fingers, they nip the beard, or extract it from the chin and face.—*Narrative of the U. S. Exploring Expedition.*

IMPROVED STOCK IN MISSISSIPPI.

Sheep.—My general plan for breeding sheep for some years, for plantation use, has been to cross the Bakewell (as we call them) on the Southdowns. I find that the produce is very hardy, of early maturity, easily fatted, and yields about eight pounds per head of medium wool, such as we require for family use, and worth in this market from twenty-five to thirty-three cents per pound. In addition to this, the mutton commands a better price in our market, and the carcass is at least a third heavier than the Saxony or Merino. I have imported several Bakewell and Southdown sheep from England, but consider the risk and expense of doing this hereafter as unnecessary, as I feel confident that as good stock may be now had in this country. Indeed, my last importation has not improved my stock at all.

Another plan in breeding with me is to select a portion of my coarse wool ewes, and put them to the Southdown ram, and the fine wool ewes to a Bakewell. In this way I get a heavy crop of good wool, and the best of mutton. For domestic purposes we do not want better wool at the South, and as to the mutton, the bare sight of it would make the mouth of even a London alderman drip like a fresh-tapped sugar-maple tree in February.

In selecting the rams ordered, I wish you to obtain those of good size, fine compact forms, heavy quarters, long wool, &c., &c.

Cattle.—My experiment with Durhams has not been successful. I have imported from England at high prices; ransacked Kentucky, Ohio, and Tennessee, for the best blood, and taken great pains with them when procured. The hot sun and coarse grass of the South do not suit them. They soon become delicate and unhealthy, and, compared with our native stock, very unprofitable. We want well-shaded pastures of rich, soft grass, running water, and such attention as can only be given by those who are *farmers* and not *planters*. Then they would succeed, and do well; but as nobody in this country is situated to treat them in this way, it is folly to attempt anything beyond the half-bloods, which, crossed upon the large Choctaw cows, make good milkers and fine beef. Go one step beyond this, and they become nearly worthless. Such is my experience. In the hands of more enterprising agriculturists they may do better; but I doubt the practicability of breeding them in this climate.

M.

Mississippi, June, 1845.

Farmers and Mechanics in Mississippi.—I wish that more of your northern farmers and mechanics could be induced to settle among us. We are about one hundred years behind you in improvement This could be made a splendid country, if there were more of the northern enterprise here. There is no doubt in my mind but the sickness of this climate is caused in a great measure by the manner of living, and exposure to the sun. I know persons here that have never had a fever. We want good mechanics —men of steady habits, &c. We have a number

here, but there is too much dissipation and uncertainty among them. Land is very cheap, and thousands of acres that could be purchased. If they are opposed to slavery, they need not have any here unless they wish it. Persons travelling here should leave the river and cities, and mix among the farmers and country folks, if they wish to form correct opinions of the South. We have as fine society here as I ever found anywhere, and more hospitable people I never saw.

Centreville, Miss., July 1, 1845. E. J. C.

DISEASED SWINE.

HAVING suffered some inconvenience, and considerable loss by a disease among my swine, entirely unlike anything I have before seen, and being entirely ignorant what medicine to administer, or remedy to apply, I am induced to address you on the subject.

My old hogs, and even pigs not more than two months old, have all been attacked with something like the staggers, though different, I imagine, in some particulars, from that disease. It first evinces itself by a weakness in the loins, which occasions a great difficulty in their walking. In the course of one or two days, a hard swelling is seen on the outer side of the ancle joints of both hind legs, which seems to contract the muscles below the ancle, and renders their feet entirely useless, so that they can only move, except they drag their hind parts. There is also a film over their eyes, which affects their sight, though it is not entirely destroyed. In all other parts and respects they appear as usual, having a good appetite till within a few hours of their death, which in some takes place in two or three days, in others, many weeks. Some have recovered in part; but they are ever afterward troubled with a weakness in the loins, and a stiffness in the ancles.

C. L. BRAYTON.

St. Lucie, E. F., June 17, 1845.

The above disease we think proceeds from the kidney worm, or an affection of the kidneys. It is very rare that it can be entirely cured; our correspondent must therefore endeavor to prevent it. Keeping swine in close pens or yards, particularly in a hot climate, is injurious, and, if possible, they should always have a range of a few acres of enclosure, where there are thick shade trees and running water. If these are not to be obtained, cheap shelter from the sun must be made, and water in abundance supplied for drink, together with a load of charcoal or chunks of rotten wood, to eat as they please. If there be no grass in the pasture, a little green food of any kind, should be daily given them, when not fatting, such as cut grass, clover, corn stalks, or vegetables, of any kind, which are as easily raised at the South, in their season, as at the North. This treatment will prevent all diseases we know of, except that of the kidneys. To prevent this, a pint to a quart of lye per week, should be given in the food of each animal according to its size or age, if the disease is apprehended. If not, a dose of this kind once a fortnight or month, will answer. Half this quantity of ashes will answer the same purpose as lye. A tea-spoonful or two of saltpetre is also very good. Corn may be soaked in lye, and then fed to swine; but they must be pretty hungry before they will eat it.

When attacked by the kidney worm, or disease as above described by our correspondent, dose the first day with lye, ashes, or saltpetre, as here stated, repeating daily, till cured, only about one-quarter the first day's prescription. If the animal stales profusely, reduce the lye and saltpetre to one-half or one-fourth of the amount of this prescription. We have also found a table-spoonful to a gill of spirits turpentine effectual, and rubbing the same quantity, or even more, on the back and loins. Calomel is often administered in doses twice as large and in the same manner as would be given to the human subject. But this is a dangerous remedy, and we are extremely adverse to its use on any occasion whatever, believing that we have substitutes for it, divested of its poisonous and injurious latent effects upon the system.

DISEASED HORSES.

THERE is perhaps no subject less understood by the farmers in this country, than the nature and cure of diseases among their stock. The veterinary art is practised, with very few exceptions, by persons wholly unqualified, either by education or experience, for the vocation; hence, the reluctance that many have to entering upon it. I had occasion a few days since to call on a man who had studied at a Veterinarian School in Edinburgh, Scotland, and had practised the art for several years before coming to the United States. He brought with him here a diploma and good recommendations. On asking him why he had given up the practice, he replied, because there are so many quacks in the business in this country, mostly from Europe, it has become very disreputable, and nearly every one who employs me suspects equally my capacity and honesty. Books on this subject are extremely scarce among farmers, and many of them worthless. There ought and must be a remedy for all this. If every farmer would note down the history of any uncommon occurrence which takes place among cattle, horses, sheep, swine, or fowls; describing, as near as possible, the nature of the disease; its origin and cause; together with the manner and means made use of to effect a cure, and the final result of his practice in so doing, together with his own remarks and observations, as well as those of other men of sense and experience, where a cure has been effected in similar cases, it would throw much light upon subjects where darkness and obscurity now pervade.

In September, 1842, I was requested to take charge of a stud of horses, consisting of mares and colts, thirteen in number. I found them in their pasture, suffering with a disease showing itself in the following manner: Some had swelled tongues with blistered spots upon them, with canker and blisters upon the lips, so that they could eat nothing except a mash made of wheat bran and shorts, and only enough of this to keep them from starving. Others had a fester at the crown of the hoof, running from corner to corner, and opening a sore between the hoof and ham an inch wide, with the fore leg swollen to the shoulder. Others were affected in the same way on the hind foot, with leg swollen to the hip; and, if a horse, the sheath also badly swollen. The first thing I did was to gargle the mouth with a swab dipped in a solution of chloride of lime, washing the swollen limbs with warm soap suds for an hour or more to each limb, then bathing the part where a suppuration had taken place with water, in which

had been dissolved corrosive sublimate, arsenic, or copperas. I tried each of these on different feet, to test their respective virtues, then sprinkled over the sore pulverised blue vitriol and burnt alum. It took most of the night to perform this operation upon three or four of the tame animals; all the others, having never been handled, were nearly as wild as deer. The next morning I put the horses into a meadow of fine clover rowen, with a barn standing within the enclosure, a floor running through the centre of the barn, with a mow of hay on one side. Into this barn I would decoy a young horse or colt, get a rope over the head with a slipping noose, and, with floor covered with straw, I would bring them to the side where the mow of hay was, then they might rear and throw themselves against it or upon the floor without harm. In this way, I halter-broke the whole of them, so that I was enabled to manage and doctor them with the assistance of one man. I was completely successful in the cure of all, with no additional remedy to the foregoing, with the exception of bran poultices applied to the feet, which greatly aided in drawing out the inflammation. These, after having been on 12 hours, would become very offensive; indeed, the atmosphere of the whole barn was highly impregnated and impure. This practice was perfectly successful. Every animal recovered, with the loss of three hoofs only out of the whole; sound new ones growing out in six or eight months. These horses had travelled 120 miles through a settled country, previous to being attacked, and were four days in performing the journey. Can any of your readers tell the cause of the disease? OHIO.

Our correspondent has here met a frequent disease. It is caused by poisonous weeds. The locality of the affection shows this, viz.: the mouth and the feet, the only parts so constantly in contact with the ground as to be acted upon by weeds, to the production of disease. There are several weeds that are poisonous, and these are more virulent in wet than in dry seasons. The summer of 1842 was in Ohio a wet one, and the growth of weeds consequently great. What particular weed caused the affection mentioned, cannot now be known. In the vicinity of New York there are several weeds which, when allowed to grow freely, produce like diseases. The treatment is: 1st, bleeding, if there be much general inflammation, which is sometimes the case; 2d, bran mashes, with Glauber salts, in doses of from half a pound to two pounds, according to the size and age of the animal, and half to a whole tea-spoonful of saltpetre per day, to cool and purify; and 3d, the application of lotions, cooling and drying. Of these, sugar of lead is the best, unless the discharge from the ulcers is very abundant, when copperas may be first used, to be followed by sugar of lead.

HARDHACK.—A shrub growing two feet high, bearing a cone-shaped, lilac-colored tuft of blossoms. A great pest to the farmer. Nothing will eat it. It grows rapidly, and spreads with destructive energy. I know not its botanical name. How shall I kill it? Shall I mow it? Summer fallow? Shall I starve sheep into eating it? What shall I do? It grows in pasture which I need to occupy. TYRO.

The Tamarack Tree is the only thing we know under the local term of "Hardhack." We do not recollect the shrub described by our correspondent, and hope some of our readers will be able to answer his inquiries in full. As to killing it, we think this can be easily done; for we never saw the weed or shrub which we could not successfully battle against, by the simple process of cutting it close to the ground, just as it commenced blooming, then spread a little salt over the fresh-cut shrub or weed, and turn in a flock of hardy sheep. The cutting is injurious to the shrub, the salt destructive; for as it dissolves, it penetrates the stalk or stem to the roots; besides, if it attempts to rise again, the sheep will be pretty certain to gnaw it down in nibbling for the salt.

WESTERN CALENDAR FOR AUGUST.

DURING the whole of this month in the hemp-growing regions, all hands must be employed in cutting and securing the hemp crop. When hemp is sown as early as the middle of March, it is sometimes ripe in the latter part of July. To afford time to complete the hay harvest, it ought not to ripen before the 1st of August. If cut too green, it is subject to injury, by exposure to a hot sun; and if not cut when fully ripe, it is subject to injury of a different kind. The operation should, therefore, commence the moment hemp is ready for the knife; and if cut within one week, it will be in good time. As the hemp grower so arranges his different sowings, as to allow of intervals between each, these different parts of the crop come on in succession, so as to enable him to cut each in due season. After sowing one-half of his intended crop, a longer interval than usual should intervene, so as to give time to put in rick the half of the crop first cut. To permit all to remain on the ground till the whole crop is cut, would frequently expose the part first cut to injury from *too much* rain falling on it. *A moderate quantity* of rain, on hemp, lying on the ground, is advantageous; *excessive* and *long-continued* rains are very injurious.

After the hemp is all cut, it is sometimes too wet to put in rick. Intervals of this kind should be embraced to employ all hands in cutting a second growth of thistles and mulleins, which sometimes spring up, and also burrs of all kinds, iron-weed (devil's bit), and other noxious weeds, which infest the woodland pastures, which may be exterminated by repeated cuttings.

In this month tobacco begins to ripen, and the utmost diligence should be used in cutting and housing it as fast as it ripens. Where neither hemp nor tobacco is raised, the wheat crop should be threshed, and delivered at the mills or sold, during this month. In the hemp region, this operation is performed, if possible, before the hemp crop comes on, by hauling the grain directly from the shock to the threshing machine, and immediately delivering at the mill. But those who have large crops, are compelled to stack their wheat, and delay threshing till the hemp crop is secured. In the wheat growing region, where wheat is the principal crop, and much ground intended to be sown, the plows should commence running to prepare the fallow or sod-ground, if any, for the coming crop.

Turnips should be sown early in this month, or, if seasonable, in the last week of July.

A. BEATTY.

Prospect Hill, Ky.

Ladies' Department.

EARLY RISING.

VOLUMES have been written upon the advantages of early rising—its influence in preserving beauty, and improving health. Many physicians recommend walking before breakfast, to young ladies whose healths suffer for want of exercise. In my humble opinion, the end would be obtained more effectually, by shaking their beds, with the chamber window open, or, in fine weather, *working* for an hour in the garden. Many a young lady makes the experiment, walks the prescribed time or distance, and returns languid and disappointed, with aching head, wet feet, and snowy stockings dabbled alternately in dew and dust, until their original hue is more than doubtful. Many a youthful bard has sung the delights of wandering in the "gray dawn of morning," to stroll with his "ladye love" "through the *dewy* mead," to "shake the glittering *dew-drop* from the thorn." All very well in their way, no doubt! though, not being a poet, I am so simple as to prefer letting the sun dry the grass, while I eat my breakfast, and agree cordially with the very sensible old gentleman, the only one of the rhyming fraternity, I believe, who has even alluded to the discomforts of such excursions.

"I love not *early morning walks;* I love not
To get my feet wet; and the bard who wrote
The silly trash of brushing dew away
To see the sun rise, hardly knew, I fancy,
What the dew was made of, or the vile effect
That frequent soaking hath on shoe leather."

Poetry, feeling, and good taste, have but one voice in regard to the benefits of early rising; but few of their votaries have dwelt as they might have done, upon the economy of *time*, that first, best gift of God to man; and fewer still have noticed the effects produced upon the mind, which becomes invigorated, and capable of greater exertion, and a more healthful tone of feeling, in exact proportion to the strength gained by the body. All know the truth of the vulgar adage, "An hour lost in the morning is looked for in vain all day;" and many mourn the neglect of these "fair occasions gone for ever by;" yet none, except those who from long experience have reaped the advantages of early rising, are capable of appreciating them. The first hours of the day are unquestionably the best for study, and by those who live at ease should be devoted to serious reading, and the acquisition of useful knowledge. I know a lady, who, between the hours of five and seven, A. M., made herself mistress of the French language, and read the works of all the best historians, from Josephus to those of the present day. This was the employment of the long dark mornings in winter; in summer she worked during the same hours in the greenhouse and garden, where every vine was trained, and every shrub was trimmed by her tasteful hand, until the whole smiled, a perfect paradise of sweets. The remainder of the day was devoted to domestic occupations, in which she excelled, and to society of which she was an ornament.

Another lady who, during a long life, rose at four o'clock, throughout the year, with whom I was on terms of intimacy and friendship, has often showed me the many large volumes which she had filled with copies of original documents of our early colonial history. The letters from which she drew them have almost crumbled to dust by the ravages of time and early neglect; the hand that copied them is mouldering in the grave; but the volumes will long be consulted as books of authentic reference, by the antiquary and the historian. After breakfast she had no time for literary pursuits, for then her husband, her children, and her family concerns demanded and received her assiduous attention. She directed and *assisted* her servants; showing by example how labor could be saved by timely thought and system. No dairy produced finer butter and cheese—no house was kept in more exquisite order—yet no one had more leisure for exercising the rights of hospitality; and over the whole she presided with so much dignity and grace, and her conversation was so varied and instructive, that her society was sought not only by the first in rank in our own country, but by nobles from other lands.

An amusing instance of her habitual neatness, I will record for the benefit of some who may think daily sweeping unnecessary. A French gentleman while on a visit to her husband, cut his face with a razor, and wished to apply the well known remedy of *cobwebs* to staunch the blood. The lady was sadly at a loss—she did not like to say there were none in the house; so she permitted a search to be made in every nook and cranny, from the garret to cellar and sheds of her large and stately mansion; but not a spider had been allowed to spin in peace and comfort. With all his French politeness, the guest could scarcely conceal his vexation, when at last, one of the boys rushed into the hall, crying out in great glee, "Papa, I have found a cobweb in the stable!" His mother's jurisdiction did not extend to that.

I could mention many other instances of the wonders wrought by stealing an hour or two from sleep *in the morning;* but I must hasten to tell my young friends what country girls may effect, who have the active concerns of the homestead to attend to. The first step, they must fix the good *habit* of going to rest by *ten o'clock.* Country visiters have all taken their leave long before that hour. This they will find to be the best preparation for the labors of the next day; and after *seven hours'* sleep, they will be ready to rise at *five o'clock.* In addition to the usually neatly arranged wash-table, every chamber should be provided wtth a *tub* at least 18 inches in diameter, and 9 inches deep. In this, nearly full of fresh cold water, each should wash from head to foot, and rub well with a coarse towel, every morning in the year, before they dress. The advantages are, perfect cleanliness, brightness of complexion, good health, and a complete cure for the lazy fever. There must of necessity be a wash-bench in every kitchen or shed; but the use of it, as the only daily means of purifying, is much to be blamed, as the head and hands only can be properly cleansed, without undue exposure, and injury to the dress.

The windows of the chambers should be thrown wide open, even in stormy weather, while the bed is well shaken, and the room put in accurate order before it is left. With the generality of our farmers' daughters, the morning brings nothing but the cheerful bustle of active employment, in which reading to advantage would be as impossible as it would be out of time; yet early rising is not the less necessary for

the girls who like to enjoy leisure for intellectual pursuits in the after part of the day. The beds can be made as well before as after daylight—the bread set to rise—the pies made ready for the oven—and the comfortable, social breakfast prepared and eaten—the younger children bathed and dressed—and a thousand little *odd jobs* done which will wonderfully help on the more laborious work of the day. Wilson, the Ornithologist, a poet of nature's own forming, while dwelling with delight upon a scene in a Pennsylvania farmer's kitchen, where every body was busy by candle-light, one cold morning, says:

"Even little Mary in the corner sits,
And while she nurses pussey, nicely knits."

Who has not felt the real comfort of being beforehand with time, after an unusually early start in the morning? how the day seemed to lengthen, and give ample time for everything to be done quietly! What a pleasant spur was given to exertion, and with what satisfaction such a day has been looked back upon!

Where the work is systematically arranged, there is a certain portion only to be done each day; for instance, washing and churning never come at once, nor baking and ironing. Each day has its appropriate labor, and where the family is large, the girls should take regular turns, so that one should always be released from active employment, and take the work-basket or spinning-wheel, which would prevent any unpleasant bustle, if unexpected visiters arrived. But I here declare determined war against the plan, too often pursued, of giving all the sedentary employment to the sister or aunt, who happens to be in delicate health, or is less robust than the others—this is cruel kindness! If she be really sick or disabled, nurse her tenderly, until returning strength allows her again to be useful; but beware of prescribing for symptoms instead of curing disease. Never let her indulge the languor which debility naturally produces, and which increases if not judiciously checked; but tempt her to exert herself in dry, light work, if it be only gathering and arranging flowers in the parlors, until she is actually tired; and then, after giving a little nourishment make her *lie down while she rests;* but never permit her to sit down to sew or read until both mind and body are refreshed.

After dinner in summer, and after supper in winter, there are always some unappropriated hours—I mean for those who have earned leisure by rising early—and this is the time when a course of reading can be gone through with. If there is no important sewing, several might be engaged in study; but even when the needle must be plied most earnestly, one could be spared to read aloud some well known chosen book. I do not like to anathematize *all novels*—but I will say that works of fiction *never made great, good, or valuable characters;* and the fewer read the better. No one can complain at the present day, of the want of books that combine utility with amusement. There is a wide range of history, travels, biography, and works on natural history and natural science, written in so attractive a way, that the only difficulty is to choose between them, or lay the book down when begun. Literature is cheap now, and the book of knowledge is no longer sealed up from farmers, even in sections of country remote from cities. If the young people are early allowed to acquire a love for serious and valuable information, and these family reading parties are looked forward to as a recreation, not a task, we shall soon hear no more complaints of the insipid conversation of country girls.

It would be a good plan for neighbors who are most congenial in spirit, to form little associations, and meet once a week or fortnight, at each other's houses, to read, and improve themselves and each other by conversing on such subjects as are of real interest. If they love botany or mineralogy, they should bring specimens to compare and analyze. These intellectual pursuits need not preclude an amicable rivalry as to who shall rear the finest flowers and fruit, make the best butter, or the prettiest patch-work bed-cover; for they should always carry some neat sewing to these meetings. The fingers need not be idle because the *mind* is exercising its powers. Knitting stockings and gloves and braiding straw are graceful and pleasant works, which can be done almost as well without the use of the eyes, as with it, and therefore particularly well adapted for social meetings. The first mentioned I earnestly recommend to my *young* friends; for while amusing themselves, they can make firm, strong hats for their fathers and brothers, which will outlast half a dozen bought ones—and for themselves, pretty, fine straw cottage bonnets, which, as they will cost nothing but the pleasant labor of making, may, after being worn for one season as *best*, be taken into daily use in place of the shapeless, tasteless, inconvenient sun-bonnets now worn, by which so many pretty faces are disfigured. E. S.

To JUDGE OF THE QUALITY OF WHEAT FLOUR.—Take four ounces of the flour of wheat, separated from the bran; let it be mixed with water so as to form a thick paste, which must be thoroughly kneaded for a quarter of an hour. The paste is afterwards to be well washed, continually kneading it with the hands under the water, and changing the water from time to time. This washing and kneading are to be continued until the water no longer becomes white by the operation; the glutinous matter, which is of a whitish gray colour, then remains in the hands. If the wheat was sound, the matter is glutinous and elastic; if the wheat was heated, the matter will be brittle; if the wheat was in a state of fermentation, no glutinous matter will be obtained from it.—*Family Receipt Book.*

To MAKE SOAP WITHOUT BOILING.—Take one gallon of lye, strong enough to bear up an egg, to every pound of grease. Put the lye into your barrel, and strain the grease hot through a sieve or cullender. Stir this three or four times a day, for several days, or until it thickens. By this process you have soap, clearer and with much less trouble than in the old way.

A PREVENTIVE OF CHILBLAINS.—The most effectual mode of guarding against chilblains is to accustom the skin to a moderate friction; to avoid clothing the parts too warmly; to avoid still more carefully sudden and great alterations of heat and cold; to take particular care not to go into a warm room, or near a fire, out of the cold air; and to wash the parts frequently in cold water.—*Cooper's Surgical Dictionary.*

Boys' Department.

THE HISTORY OF THRIFT AND UNTHRIFT.

In the neighboring village hard by, there are two farmers of equal standing as regards honesty of purpose, benevolence of intention, and all the social virtues. They both mean to discharge all their duties to society, their families, and friends, and it is only when we try them by their performance, that we find any striking difference. But to mark their qualities more fully, and afford instruction through the successive progression of their parentage, youth and manhood, we must notice them distinctly in each.

Their Fathers.—They were both born in the village in which they now reside, and of equally reputable parents. Both were farmers and respectable members of society. The same year that the father of Thrift was sent to the General Assembly, the father of Unthrift received a commission for the office of Justice of the Peace. There was a slight difference in their respective characters in one particular. They were both "well to do in the world," as the phrase is; but while the elder Unthrift had inherited all his property, a part of which he had already spent by his easy good nature, and somewhat indolent habits, the father of Thrift had been a poor boy, and worked his own way in the world; and having married early in life, had brought up a large family, while the other had but this only son.

Their Mothers.—The greatest difference, however, in their parents was in their mothers. Like her husband, Mrs. Thrift, was a poor child, and an orphan, but had been brought up by a widowed aunt, in habits of great industry, order, and economy. She was early taught to have a place for everything, and everything in its place; to waste nothing, and spend no time in idleness; and when her work was done, instead of sozzling away her time, playing with the kitten or her apron strings, or sauntering with Goody Tittletattle's girls, and gossipping about the young men, she devoted her leisure hours to reading useful books, or making up counterpanes, knitting stockings and other articles that might be useful; so that when she had become one-and-twenty, she not only had her mind well informed, but had made up quite a wardrobe for herself, and had acquired so good a character, that Mr. Thrift thought, and rightly enough too, she was a very good match as a wife. Mrs. Unthrift on the other hand, had been indolently and indulgently educated, and always having enough on hand, without any necessity for looking out for herself, her parents being "well off," she arrived at what ought to be "years of discretion," without any particular habits of any kind; yet being a pretty, amiable girl, and, withal, having a prospect of inheriting some money, Unthrift thought himself a lucky dog in securing her as a partner for life.

Their Boyhood.—The boys went to the same district school; yet though Unthrift was nearly two years the oldest, little Thrift soon caught up to him in his studies, when being put in the same class, he easily got above him, and after that, generally stood at the head, while Unthrift stood at the foot. This was not owing to any want of *cuteness* on the part of Joe, or Josey, as he was generally called, for occasionally, when any prize was offered that Joe wanted to obtain, he would, by a little application, outdo all the boys and secure the prize; while Tom, as they called young Thrift, would study with all his might, without coming within arm's length of Joe. At hunting, fishing, or frolicking of any kind, which required ingenuity or skill, Joe was sure to be ahead of all his playmates. But then, his habits were negligent, he was half the time late at school, his lessons given him over night, not half learned when he got there, and he had very little idea of minding any of the rules; not that he was stubborn or bad tempered, but he "didn't see any use in sitting in his own seat for three hours together, and learning arithmetic, geography, and grammar, neither of which would help to tree a squirrel, hole a fox, catch a trout, or bring down a turkey at a shooting-match." Tom was always punctual at school, always had his lesson learnt, though he had to work hard for it, and always did as he was bid by the master, simply because his parents told him, this was the only way to make a man of himself—and he believed them. Josey's parents indulged him as they indulged themselves, and let him take pretty much his own course, as they had done before him, and it was universally believed, had the boys *swapped* parents when they were babies, Joe would have been much the smartest scholar of the two.

Grown up.—The boys had already got to be men, while they still thought they were youngsters, and before they were three-and-twenty both were married to young women in the village, something after their own character.

Their Wives.—Tom's wife was the daughter of a poor, but hard-working wagon-maker, who had always been accustomed to industrious habits; while the wife of Joe had received many more advantages in school, though it is said she had misimproved them; but she could do worsted embroidery, draw pretty well from a copy, and play common psalm tunes, Yankee Doodle, and country dances, on the piano.

Their Occupation.—Tom took to farming, as his father had done before him, and as he had nothing of consequence to begin with, he rented a small farm which his father helped him to stock. He had of his own, a pair of oxen, a few sheep, and some tools, which a couple of years of hard service since he "came of age," had enabled him to purchase; and his wife had besides, three good cows given her by her mother, while her father gave him a good second-hand ox-wagon. Tom and his wife went "right" to work. They were up by day-light in the morning, and by the time he had his "chores" done, the cows milked and turned to pasture, the oxen curried, fed, and yoked, and the pigs provided for, breakfast was on the table, so that he was ready to go out to his day's work by the time Josey and his wife had "turned out of bed." [*To be continued.*

Unripe Fruit.—More boys are made sick at this season of the year from eating unripe fruit, than from any other cause whatever. Be careful then in this particular, and learn to govern your appetites. This will be good discipline for you.

ADMONITION.—Samuel Cook, a young man of Norwich, Conn., ruptured a blood-vessel while chasing some turbulent boys from his premises last Saturday, and in the course of an hour was a corpse.

FOREIGN AGRICULTURAL NEWS.

By the arrival of the steamships Britannia and Great Western, we have our European journals to July 5th.

MARKETS.—*Ashes* still continue dull. *Cotton*, of the lower qualities has advanced ¼d. per lb.; Sea Island, ½d. per lb., the demand brisk. The stock on hand at Liverpool, 1st July, was about 1,043,000 bales, against 901,000 same period last year. *Flour*, on the advance. *Beef* has fallen a trifle. *Pork* and *Lard*, though dull, maintain their price. *Cheese*, in good demand. *Naval Stores* slow of sale. *Tallow* in fair request. In other products no material change.

Money is the same as by our last advices.

American Stocks have experienced a slight advance, and since the resumption of payment of Pennsylvania interest, are looked upon with more favor.

The Weather was slightly unfavorable for the ripening of the grain crops; but they were looking well, and it would be premature to decide yet upon the prospects of a good or bad harvest.

Colonel Todd, of Kentucky, the American Minister at St. Petersburgh, so deservedly popular in the Russian Capital, has been appointed a member of the Imperial Agricultural Society—an honor never before conferred upon a foreigner.

The Example Farm of Lord Ducie, at Whitefield, now produces twenty-three times as much wheat as it did under its former management.

Molasses for Fattening Cattle.—Some spirited cattle-traders have begun to use molasses for fattening their stock, and if the Porto Rico molasses should be admitted, the supply will be abundant and the article cheap.

Crops without Manure.—We wonder the press of the country has not more sense than to copy such humbug paragraphs as the following: "The Railway Bell announces a discovery of a Dr. Bickes, by which the earth, including the poorest soils, and even sand, are made to produce abundantly all sorts of crops, without any kind of manure."

The Famous Long-Horned Cattle Revived.—It is said that these cattle have been revived, and are now bred with great success in England. Several were to be exhibited at the annual show of the English Agricultural Society, which was to come off the past month at Shrewsbury. We saw a few animals of this breed when in England, and found them nearly equal to the Short-Horns in symmetry, early maturity, and good milking qualities.

Gastrotomy.—Mr. George Topps, of Newton, was called in to see a young heifer, belonging to Mr. John Godfrey, farmer of Tyd, St. Giles, when finding the ventricular distension not yield to the usual remedies, he proceeded at once to perform the operation of gastrotomy, or opening of the stomach; from the cavity of which he extracted three heaped large pailsful of food! On the following day, the same veterinary surgeon extracted a calf from the same heifer—both of which are doing well.—*Stamford Mercury.*

Chinese Grass.—During the past week, Messrs. Hargreave and Brothers, flax spinners and power-loom linen manufacturers, of this town, called at our office and exhibited a sample of Chinese grass. This article is represented as possessing all the qualities of flax, but in a higher degree than any other known to our spinners or manufacturers—surpassing the best qualities in strength, fineness, and length of staple. These gentlemen also showed us a sample of fine linen manufactured by them from this article, which greatly resembled French cambric, but with a more silky appearance.—*Leeds Mercury.*

Early Lucerne Clover.—We have seen a specimen of very early clover of the above description, measuring fully two feet in height, grown at Stedhalt, on the property of William Walsh, Esq., who, we understand, has been cutting it for the use of his horses since the 1st of May. This is the first clover we have seen for the season, and we understand what adds to the merit of this description of clover is, that it is a perennial plant. The sample of this extraordinary early growth can be seen at our office.—*Drogheda Conservative.*

The Beneficial Effects of Irrigation have never been more clearly demonstrated than by this season's crops at the Reed Beds. Of fruit, the produce is abundant; but the wheat crops, generally good, are on some sections extraordinary. At Wymondlybury (Dr. Addison's farm), the wheat crop is unusually heavy, that of White Talavera, standing about six feet in height, the ears exceedingly well filled, and several we have seen (plucked indiscriminately) measure seven inches in length. The produce is estimated by competent judges at about forty-five bushels per acre.—*South Australian.*

French Agriculture.—The French commission on irrigation states the following facts as to the present condition of several branches of agriculture in France: 1st. The supply of cattle is so deficient, that animals and animal food of the value of ninety-four millions of francs are imported yearly; 2d. Fifteen thousand foreign horses are required every year to supply the demand for horses for war and industry; 3d. The plowed land in France is to the grass land as 6½ to 1, whilst in most of the neighboring countries it is only as 3 to 1, and in England and Holland, 2 to 1; and 4th, there are means of forming not less than two millions of hectares of artificial irrigated meadows in France, which would produce a revenue of about eight millions sterling.—*New Farmers' Journal.*

An Old Mare.—Thomas Pedder, of Scale Hall, near Lancaster, has in his possession a capital mare, in daily work, thirty-one years of age, and she has a fine foal at her foot. She has served him faithfully for nearly the above lengthened period, and, from appearance, is likely to do so for some years to come.—*Preston Pilot.*

A Very Old Ewe.—Mr. Robert Vincent, of Pinney Farm, Axmouth, has amongst his flock a ewe 21 years old. We believe this is almost an unprecedented age for a sheep. The animal has proved an excellent breeder, generally having twins, and she has now by her side a lamb fit to be weaned.—*New Farmers' Journal.*

To Grow Carrots in a Stiff Clay Soil.—The ground having been double-dug, holes were made in rows eight or ten inches apart, and the same distance between the rows, with a crowbar, thrust about eighteen inches deep and worked round, so as to form a clear hole in the form of an inverted cone; the holes were then filled with good light mould, and a few seeds sown on the top of each. It being intended that one plant only should occupy each hole, all the young plants were, in due time, drawn from each, save and except one, and that of course the strongest. The seed used was the red Altringham, and many of the plants were very strong, and all perfectly straight—a quality seldom obtained in heavy soils, and the crop far superior to others sown and treated in the usual way. I regret that the crop was not weighed in comparison with the others. However, it has satisfied me that I can grow good straight carrots upon a soil which is almost tenacious enough to make bricks; and, in reality, this mode has the effect of converting the ground into a series of conical pots, and very cheap pots too. I believe that this method is, in point of economy, applicable to field culture.

Enthusiasm of the English People in Horticulture.—On the 21st of June, TWELVE THOUSAND, THREE HUNDRED AND FIFTY-FIVE FELLOWS of the Horticultural Society, and their friends, assembled at Chiswick at the opening of the second exhibition of flowers this season. The first exhibition took place in May.

Remedy Against Hydrophobia.—Dr. Burnes, on learning that two tradesmen had been bitten by a mad dog, instantly cauterized, cupped, and excised the wounds; and had also recourse to the singular method of making the patients suck their wounds. This course the Doctor recommended ten years ago in the *Lancet;* and he says that no danger whatever is to be feared from it, if the mouth and lips are free from sores or chaps.

Bones and Sulphuric Acid.—Mr. P. Davis says, with reference to Mr. Pusey's suggestion as to the propriety of using bone-dust dissolved in sulphuric acid, along with *compost* instead of *water*, for turnips, I can confirm this idea from practice, having last year manured five acres with only 13 bushels of bone-dust dissolved in 270 lbs. of the acid and 150 gallons of water. After standing 24 hours, the liquid was mixed with three cart-loads of coal ashes, and left to remain for a week; during which time it was turned over two or three times. The mixture was then drilled along with the seed; and the result was a fair crop of common turnips off a piece of poor land, without other manure, and at a cost of only 12s. 9d. per acre.

Culture of Flax.—We learn from good authority that flax will be grown this year, more or less, in every county of England, and it is expected somewhat extensively in Sussex. One gentleman will sow nine acres.—*Brighton Gazette.*

Progress of Short-Horns.—The Great National Irish Agricultural Society appears to have adopted the plan so long followed by the Union Agricultural Society, of diffusing the Short-Horned breed over Ireland. At the recent annual meeting, sales to a great extent were made, in addition to the usual business of premiums, &c.

Double Eggs Joined by a Filament.—We have had sent us from Summerville two hen-eggs, the yolk and white perfect, but without any shell, and which are firmly joined together by a filament. A scientific friend has favored us with the following remarks upon them:—These eggs are very unusual productions; but I think their having been born together may be accounted for by the fact, that eggs are always formed in a long chain, and that only one is in general detached at a time, when its communication with the one above has been cut off by a complete deposit of phosphate of lime round it. The hen, in this case has been about to cease laying, and has likely been badly supplied with lime or broken shells, without a large supply of which no hen can complete an egg, or be a good layer. In many eggs you will notice a swirled appearance of the shell at the ends, showing where the lime has been liberally supplied, or rather applied, to separate it from the eggs above or below it. I believe that the fowl has not had liberty enough to enable it to gratify its appetite for chalky substances, or this arrest in the development of these eggs would not have occurred. —*Dumfries Courier.*

French Agriculture.—The Presse publishes some extracts from a work presented to the Agricultural Congress now sitting at the Palace, of the Luxembourg by the author, M. Catineau Laroche, and entitled, "France and England compared with respect to Agricultural, Manufacturing, and Commercial Industry, and the consequences to be deduced from this comparison." It appears from this work, that England, in comparison with the extent of its surface, possesses four times more cattle than France. And as it is not possible to pursue a judicious system of agriculture without manure, and as the feeding of cattle is the most productive of supplying manure, it follows that before France can compete with England in agricultural wealth, she must increase her stock of cattle, but in order to do so she must increase her pasture lands or meadows. "France," says M. Laroche, "possesses but 4,200,000 hectares of natural meadows, or only 1-16th of her cultivated soil. From this calculation it may be easily comprehended, how insufficient is her supply of green food, and that it becomes absolutely necessary that she should substitute another to the triennial system at present in use." M. Laroche concludes by stating, that if the alternate system of cultivation pursued in England was introduced into France, the produce of corn would be doubled within twenty years. Fifty-five years since, the produce of Great Britain was estimated by Arthur Young at three milliards. At present it is estimated at five milliards 725 millions."—*New Farmers' Journal.*

Fibrous Covering Stimulates Vegetable Growth.—A light covering of *straw*, for instance, on grass land, will stimulate its growth in an extraordinary degree; much more indeed, it would appear, than can be accounted for on the supposition that the ground is thus kept moist in dry weather.

Average Rent of Land in England and Wales.—The average rent of land in England is said to be 18s. 10d., and that of Wales, 9s. 5d.; the average of England and Wales, 17s. 8d. The produce of wheat in England and Wales is probably under twenty-one bushels per acre.

American Ice.—A novel article of import has recently taken place in the shape of ice from America, in the neighborhood of the Wenham Lake, &c. The article is brought in large blocks, varying from 2 cwt. to 4 cwt., and several vessels have arrived laden almost entirely with it, having several hundred tons on board. It is deposited in the ship's hold with care, and covered and surrounded with wood dust, and so arrives in a very perfect state, with very little loss in weight, particularly at this period of the year. The greater portion of that hitherto imported has been landed at the St. Catherine docks, where a shed or warehouse has been appropriated in a cool portion of the south quay, and to which it is removed on being landed and deposited until removed to the owners' private stores.

Curious Hatching.—During the greatest heat of the summer of 1843, a chicken was hatched in my hen-house, from a nest-egg which had so long served the purpose that it was on the point of being removed; it was hatched by the hens which successively chanced to lay their eggs in the nest, aided by the unusual and equable heat of the atmosphere.

Endurance of Arabian Horses.—I was present at a race in Persia, and there was no question about the choice of the best turf, or taking precautions against accidents; neither was the race limited to a few minutes. The winning point was at the distance of seven *farsangs*—that is, ten or eleven leagues, or twenty-six or twenty-seven English miles, across a rocky country, without any indicated road. The winner arrived in an hour.

When Sir John M'Neil was physician to the British embassy at Teheran, he went to visit one of his countrymen, who was ill, at Ispahan, and he assured me that he arrived in four days with his horses. The distance is about 120 leagues.

I was shown, in the stables of Feth-Ali-Shah, the Arabian horse on which that prince came from Shiraz to succeed his uncle. He traversed the distance in a much more extraordinary manner, if we may believe Malcolm, for it took him only seven days. This faculty of travelling for a long time without stopping, and their great abstemiousness, causes the horses of the province of Nejd to be particularly esteemed.

The young Pole whom I met at Djedda, and who had travelled thither through that country on his way to Bussora, attributed these qualifications to the training of the horses and the difficulty of procuring food for them. According to him they have to accustom themselves to brackish water, and to live on a species of thistle, the only plant met with in those deserts. None but animals of a strong constitution can endure this regimen.—*Narrative of a Mission to India.*

Editor's Table.

Errata.—In the article "Farm of Dr. Pool," page 209, line 8, for *quarts*, read *pints*,—thus: "The milk from one pure Alderney cow yielded at the rate of a quart of the richest cream to 13 *pints* of milk."

The same page, line 25 and on, we made some mistakes as to pedigree of horses. It should read; "Medora, got by American Eclipse, out of Maid of the Forest, by Marshal Duroc; g. dam by Lottery, by imported Expedition, &c. Indiana was got by Sir Archy, out of Votress, by Constitution; g. dam Meretrix, by Magog," &c.

Statement of the Value of the Exports of the Growth and Produce of the United States, for the year ending on the 30th day of June, 1844.

THE FOREST.

Skins and furs,	$742,196
Ginseng,	95,008
Product of wood:—	
Staves, shingles, boards, etc.,	1,672,179
Other lumber,	326,945
Masts and spars,	23,274
Oak, bark, and other dye,	70,370
All manufactures of wood,	919,100
Naval stores—tar, pitch, rosin, and turpentine,	818,692
Ashes, pot and pearl,	1,140,848
	$5,808,712

AGRICULTURE.

Product of animals:—	
Beef tallow, hides, horned cattle,	$1,810,551
Butter and cheese,	758,829
Pork (pickled), bacon lard, live hogs,	3,236,479
Horses and mules,	315,696
Sheep,	27,824
Vegetable food:—	
Wheat,	500,400
Flour,	6,759,488
Indian corn,	404,088
Indian meal,	641,029
Rye meal,	104,391
Rye, oats, and other grain,	133,477
Biscuit or ship-bread,	388,603
Potatoes,	74,108
Apples,	51,465
Rice,	2,182,468
Tobacco,	8,397,255
Cotton,	54,063,501
All other Agricultural products:—	
Flax-seed,	23,749
Hops,	51,550
Brown sugar,	12,363
Indigo,	1,176
	$79,938,410

A Cow with Three Calves.—We saw yesterday, on the farm of N. B. Moore, near this city, the novel spectacle of a cow with three calves. The calves are about three days old, and though small, evince remarkable sprightliness. We have often heard of cows dropping two calves, but this is the first instance of three we have ever known.—*Augusta Chron.*

To Kill Crows.—Steep a piece of meat in a solution of strychnine or arsenic, and hang it on a pole. The crows pick at it with great avidity and are destroyed in great numbers.—*Somerville Pennant.*

Large Apple Tree.—At Hackensack, New Jersey, there is an apple tree, which measures 12 ft. 9 in. in circumference, and has produced 1,00 bushels of fruit in one season.

To Measure Corn in the Ear.—In a bulk of corn in the ear, measuring 12 feet long, 11 feet broad, and 6 feet deep, there will be 316 bushels and 8-tenths of a bushel of shelled corn. or 633 bushels and 6-tenths of ear corn as:

12	12
11	11
132	132
6	6
792	792
4	8
316.8	633.6

The decimal 4 is used when the object is to find the quantity in shelled corn, because that decimal is half of the decimal 8, and it requires two bushels of ear corn to make one of shelled corn. In using these rules a half bushel should be added to every hundred, that amount of error resulting from the substitution of the decimals.—*Western Cultivator.*

Beautiful Experiment.—While making some investigations on the chemical forces of plants and the circulation of the sap, we made some experiments for the purpose of seeing how far the color of flowers was dependent upon the various salts contained in the earth, and which are taken up by the forces which convey sap. We took a beautiful white rose, placed the stem of it in a solution of the yellow prussiate of potash, let it remain there four or five hours. We then placed it in a solution of sulphate of iron, where it remained until morning. On examining it the next morning, we found the petals changed to a delicate primrose color, the leaves to a dark bluish green, and the wood of the stem to a deep blue. The fragrance of the flower remained unchanged, and it looked as fresh as one that was plucked at the same time, and which had been kept in a vase of water.

The *rationale* of these singular changes seems to be as follows:—The prussiate of potash is taken up by capillary attraction, and distributed through every part of the plant. The same is the case with the sulphate of iron. As soon as the two solutions are brought in contact, the iron, acting as a re-agent, revives the prussiate of potash. This beautiful experiment can be tried by any one, care being taken that the solutions are not too strong. The effects noted above will not take place if the solutions are mixed in a vessel before using. The experiment may be varied by using any metallic solutions, the resulting colors of course depending upon the salts made use of.—*Cincinnati Atlas.*

American Cheese.—The rapid increase of this important item of the dairy, at the West, is astonishing. Last year, the aggregate value of the amount that passed through the canals and the Hudson river was over one million and a half dollars. We gather the following statistics in relation to cheese from the canal office records at Albany:—

ARRIVED AT THE HUDSON RIVER.

1834,	lbs. 6,340,000	1840,	lbs. 18,820,000
1835,	9,586,000	1841,	14,170,000
1836,	14,060,000	1842,	19,004,000
1837,	15,560,000	1843,	23,334,000
1838,	13,810.000	1844,	26,674,000
1839,	14,530,000		

—*Hunt's Merchant's Magazine.*

To Kill Lice in Trees.—Mr. G. Reed stated that when his trees were infested by lice or *aphis*, he bored into the trunk with a common nail gimblet, about an inch and a half, and put into the hole a small quantity of *unguentum*. In the course of 24 hours they all cleared out and died.—*Maine Farmer*

Destruction of Sheep.—Our friend, Mr. Smither, told us on Monday, that four of his neighbors had lost between 100 and 130 lambs by dogs, during the last two months. One farmer alone had lost about 80.—*Maysville Eagle*

Cure for Piles in Pigs.—When the intestines protrude, make a tea of mullen leaves, and after washing the parts affected with warm soap suds, bathe with the mullen tea, and in a short time they will take their proper place inside of the pig.—*Maine Far.*

Merino Sheep.—We call attention to Mr. Lewis G. Collins' advertisement of Merino Sheep in this number of our paper. His flock was selected with great care about ten years ago, by one of the best judges of sheep and wool in Connecticut. Their breeding is equal to anything in New England, and if there be any pure Merinos in the country, these are unquestionably such. Mr. C. is now breeding his ewes to a pure Rambouillet buck from the flock of David C. Collins, Esq., of Hartford, Conn. Some of his animals offered for sale were got by the Rambouillet buck Grandee, out of choice Merino ewes, owned by Mr. Collins, of Hartford. Grandee was the largest and best Merino sheep we ever saw.

To Produce Cherries without Stones.—Early in the spring, before the sap is in full flow, a young bearing tree is divided in two, down to the branching off of the roots, the pith carefully removed with a wooden spatula, the parts then united, the air being excluded by an application of potter's clay the whole length of the opening, and bound together by woollen cord. The sap soon re-unites the severed parts, and in two years the tree will produce cherries of the best kind, and having in their centre, in the place of the usual kernel, a thin soft pellicle.—*Courrier des Etats Unis.*

Consumption of Corn Meal in the West Indies.—A writer in the New Orleans Bulletin estimates this in Antigua, Dominica, Granada, Montserrat, Nevis, St. Kitts, St. Lucie, St. Vincent, Tobago, Guadaloupe, Martinique, Virgins' and Bahamas, with a population of 184,000 souls, must, in common calculation, consume—

Annually about - - - -	200,000	bbls.
Barbadoes, 25,000, Trinidad 10,000	35,000	"
Demerara - - - - - -	15,000	"
St. Thomas, St. Croix, and St. John's	44,000	"
Porto Rico, 40,000, Jamaica, 30,000	70,000	"
Making - - - - -	364,000	"

The average net price of corn meal for 20 years throughout the West Indies, may be computed at $2½ per bbl., a price sufficient to recompense its manufacture. The meal must be equal to the best Philadelphia, kiln dried, made from the best yellow corn, packed in barrels of 196 lbs. net; and, so packed, that, on opening the barrel, it is perfectly full. The barrels should be clean when shipped, have a plug for convenience of sampling, well lined and riveted.

To preserve Hams from the Fly.—These are effectually preserved from the fly, while their quality is not at all injured, by throwing red pepper upon the fire in the smoke-house during the latter part of the operation.—*Tennessee Agriculturist.*

Analysis of Cotton.—Professor Shephard of South Carolina, made an analysis of cotton, including the wool and the seed, which is reported in the Southern Agriculturist. We regret that he does not state the respective proportions of the constituents. They were carbonate of potash with traces of soda; phosphate of lime with traces of magnesia; carbonate of lime carbonate of magnesia; silica; alumina; sulphate of potassa; chloride of potassium; chloride of magnesium; sulphate of lime; phosphate of potassa; oxide of iron and manganese.

THE FARMER'S LIBRARY AND MONTHLY JOURNAL OF AGRICULTURE: Edited by John S. Skinner, and published by Greeley and McElrath, Tribune Buildings, New York, pp. 112, double columns, octavo. Price $5 per year. The first number, for July, of this work, has been laid upon our table. It is got up in a style superior to anything yet attempted in the agricultural periodical line in America; and is equal in point of paper, typography, and embellishments, to the best published in Europe. Of its contents, it gives 48 pages in the "Library," to the republication of the highly valuable work of Petzhold's Lectures to Farmers on Agricultural Chemistry, and 64 pages of the "Monthly Journal," to original articles from the editor and his correspondents, and extracts principally from foreign periodicals. The embellishments are, 1st, a highly finished and spirited portrait on steel of the late Patroon—Hon. Stephen Van Rensselaer; 2d, a beautiful lithograph of a group of Southdown sheep; and 3d, a lithograph of the Silk Plant from Tripoli. In editing this work it is the design of Mr. Skinner to fill up a niche not yet before attempted in American agricultural periodicals; and if we are to take the first number now before us as a sample of such as are to follow, he is bound to succeed, and that eminently. The name of the veteran John S. Skinner, the father of agricultural periodical literature in the United States, is so well known to the public that it needs no further endorsement from us. We welcome him to New York, and hope he may find such encouragement in this State, and the country at large, as to warrant his continuing his publication as long as he may be able to look upon a green field, or wield the agreeable pen he does, descriptive of its treasures and its beauties.

CATALOGUE FOR 1845 and 6, of Camellia Japonicas, Green-house and Stove Plants, &c., &c., cultivated at the Exotic Nursery and Horticultural Gardens of Valk & Co., Flushing, Long Island, New York. This is an elegant octavo pamphlet of 92 pages, and will be sent gratis to any one soliciting it, *free of postage.* We shall be pleased to execute orders for any of our friends desirous to obtain plants, flowers, &c., &c., from the magnificent and extensive conservatory and gardens of Messrs. Valk & Co. One of the partners has recently returned from a tour in Europe, for the purpose of selecting all that was rare and useful in their line; and taking it altogether, we think their establishment the best stocked of any other to be found in the United States.

ALABAMA PLANTER, Edited and published by W. W. McGuire, Mobile. Folio, 8 pages, weekly. Price $5 a year. The first number of this paper is well selected, and mixed in with a few racy editorials. It is designed, more particularly, to advance the agriculture of the South. Such publications are much needed there as well as here, and we trust the enterprising editor will find sufficient encouragement to go on with his periodical by the 1st of October next, as he proposes.

POSTAGE.—Under the new postage law, the letters addresssed us, have increased at least five fold. But we beg our correspondents to reflect, that because postage is cheapened, it is no reason why *we should pay it all.* Postage to the many who address us, is a small amount individually, but a large one to us in the aggregate. We are always happy to pay postage on good contributions for our paper, and on our own affairs; but when the business is that of the person addressing us, and it puts us to some trouble without any profit, it would be no more than fair for correspondents to pay their own postage.

ACKNOWLEDGMENTS.—The Premium Lists of the Oneida County, N. Y. Agricultural Society, and Agricultural and Horticultural Society of New Haven, Conn.

REVIEW OF THE MARKET.

PRICES CURRENT IN NEW YORK, JULY 24, 1845.

ASHES, Pots,	per 100 lbs.	$3 81	to	$4 00
Pearls,	do.	4 12	"	4 25
BALE ROPE,	lb.	6	"	9
BARK, Quercitron,	ton,	22 00	"	23 50
BEANS, White,	bush.	1 12	"	1 25
BEESWAX, Am. Yellow,	lb.	28	"	33
BOLT ROPE,	do.	12	"	13
BONES, ground,	bush.	40	"	50
BRISTLES, American,	lb.	25	"	65
BUTTER, Table,	do.	15	"	18
Shipping,	do.	8	"	11
CANDLES, Mould, Tallow,	do.	9	"	11
Sperm,	do.	25	"	38
Stearine,	do.	20	"	25
CHEESE,	do.	4	"	8
COAL, Anthracite,	2000 lbs.	4 50	"	5 50
CORDAGE, American,	lb.	11	"	12
COTTON,	do.	5	"	10
COTTON BAGGING, Amer. hemp,	yard,	13	"	15
American Flax,	do.	16	"	17
FEATHERS,	lb.	26	"	33
FLAX, American,	do.	6½	"	7½
FLOUR, Northern and Western,	bbl.	4 25	"	4 88
Fancy,	do.	5 00	"	5 50
Southern,	do.	4 12	"	4 88
Richmond City Mills,	do.	6 50	"	7 00
Rye,	do.	3 00	"	3 25
GRAIN—Wheat, Western,	bush.	1 00	"	1 08
Southern,	do.	1 00	"	1 05
Rye,	do.	65	"	67
Corn, Northern,	do.	50	"	53
Southern,	do.	49	"	50
Barley,	do.	50	"	52
Oats, Northern,	do.	42	"	44
Southern,	do.	38	"	40
GUANO,	100 lbs.	2 50	"	3 00
HAY,	do.	50	"	60
HEMP, Russia, clean,	ton,	200 00	"	210 00
American, water-rotted,	do.	105 00	"	185 00
American, dew-rotted,	do.	75 00	"	125 00
HIDES, Dry Southern,	lb.	9	"	10½
HOPS	lb.	12	"	15
HORNS,	100.	2 00	"	8 50
LEAD.	lb.	3	"	4
Sheet and bar	do.	4	"	4½
MEAL, Corn,	bbl.	2 31	"	2 56
Corn,	hhd.	11 50	"	12 00
MOLASSES, New Orleans,	gal.	28	"	31
MUSTARD, American,	lb.	16	"	31
NAVAL STORES—Tar,	bbl.	200	"	2 25
Pitch,	do	80	"	1 00
Rosin	do.	55	"	70
Turpentine,	do.	2 75	"	3 25
Spirits Turpentine, Southern,	gal.	37	"	40
OIL, Linseed, American,	do.	66	"	70
Castor,	do.	57	"	65
Lard,	do.	55	"	70
OIL CAKE,	100 lbs.	1 00	"	-
PEAS, Field,	bush.	1 25	"	1 50
PLASTER OF PARIS,	ton,	2 75	"	3 00
Ground, in bbls.,	of 350 lbs.	1 12	"	1 25
PROVISIONS—Beef, Mess,	bbl.	8 00	"	10 00
Prime,	do.	5 50	"	6 50
Smoked,	lb.	6	"	8
Rounds, in pickle,	do.	4	"	6
Pork, Mess,	bbl.	12 00	"	13 50
Prime,	do.	9 00	"	10 62
Lard,	lb.	7½	"	8½
Bacon sides, Smoked,	do.	3	"	4
In pickle,	do.	3	"	4
Hams, Smoked,	do.	6	"	10
Pickled,	do.	4	"	7
Shoulders, Smoked,	do.	5	"	6½
Pickled,	do.	4½	"	5
RICE,	100 lbs.	3 12	"	4 00
SALT,	sack,	1 35	"	1 48
Common,	bush.	20	"	30
SEEDS—Clover,	lb.	6	"	7½
Timothy,	7 bush.	12 00	"	14 00
Flax, rough,	do.	8 50	"	9 00
clean,	do.	11 00	"	12 00
SODA, Ash, cont'g 80 per cent. soda,	lb.	3	"	3
Sulphate Soda, ground,	do.	1	"	—
SUGAR, New Orleans,	do.	5	"	8
SUMAC, American,	ton,	35 00	"	37 50
TALLOW,	lb.	6½	"	7½
TOBACCO	do.	2	"	6
WHISKEY, American,	gal.	20	"	21
WOOL, Saxony,	lb.	35	"	50
Merino,	do.	30	"	35
Half-blood,	do.	25	"	30
Common,	do.	20	"	25

NEW YORK CATTLE MARKET—July 21.

At Market, 1000 Beef Cattle (200 from the South), 55 Cows and Calves, and 3000 Sheep and Lambs.

PRICES.—Beef Cattle.—The market continues languid, and our quotations to-day show no improvement on the prices of last week. Inferior and middling qualities $3.87½ to $4; Prime $5. Unsol l 300.

COWS AND CALVES.—$13 to $27, according to quality, is the extreme range of the market. All sold.

SHEEP AND LAMBS.—Prices of Sheep from $1 to $2.50 *a* $3.00; Lambs 75 *a* $2.75. All sold.

REMARKS.—*Ashes.*—Transactions quite moderate. *Cotton* has advanced ¼ of a cent since the reception of the late European news. Export since the first September last 22,045,812 bales; Same time last year, 1,558,249; same time, year before, 1,971,776. *Flour* and *Meal* dull. *Wheat* dull. *Corn*, *Rye*, and *Oats*, scarce. *Hay* is in good demand. *Provisions* brisk. *Rice* steady. *Sugar* firm at an advance. *Whiskey* rising.

Money plenty and interest at 5 to 7 per cent.

Stocks of the better kind rather more in request.

The Weather has been excessively hot and dry, more so than we have experienced before for years—the thermometer rising for days in succession from 95 to 98 at the greatest heat. Hay has been mostly secured, and proves not more than half to three fourths of a crop in this vicintiy. North and west of us, we understand, the yield is fair. It has risen to $13 and $15 per ton, here. Wheat is nearly all harvested, and the yield is larger than has been known for years. Rye, oats, and barley are not so good; but fair crops on the whole, with the exception of the straw, which is quite short. Corn is looking uncommonly well, North and West, and will be a good crop—at the South not as good as last year. We are sorry to notice the appearance of the rot in several patches of potatoes, and we have reason to believe now that it will be as extensive this year as it was last. From the other kinds of roots we have promising accounts. Fruit will be a moderate crop. Cotton, sugar, and rice, appear well—the complaints of damages being confined to a few narrow localities. Tobacco and hemp—many complaints of short crops.

CHOICE MERINO BUCKS FOR SALE.

The subscriber offers a few two year old bucks for sale, got by Mr. D. C. Collins' celebrated Rambouillet buck Grandee, out of superior pure bred Merino ewes. Price $20 to $50. Also pure bred Merino bucks of various ages, and at different prices, according to age and quality.

We can ship sheep to any port in the country. For an account of the shearing of our flock, we would refer to the August number of the Agriculturist, page 240, and believe our stock equal to any in the country.

Apply to LEWIS G. COLLINS, Washington, Duchess Co., N. Y., or to R. R. & L. G. COLLINS, Butternuts, Otsego Co., N. Y.

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One hundred agents are wanted immediately, to promote the general introduction of this valuable invention for the manufacture of Manure in New York, New Jersey, Virginia, Delaware, and in the six New England States. Unquestionable testimonials and responsible securities will be required for the faithful discharge of the duties of the appointment. Persons of suitable qualifications will find this both a useful and lucrative employment. Applications, if by mail, must be post paid, and directed to me at Westville, New Haven county, Connecticut.

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ELI BARNETT, General Agent.

Westville, Conn., March 1, 1845.

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Also the Improved Geddes' Harrow, Rice's Seed Sower, Bachelder's Corn-planters, Cultivators, &c.

HOVEY'S STRAW-CUTTER.—The best implement in the Union for the various purposes of cutting Cornstalks, Straw and Hay. These machines are of various sizes, and moved by Hand or Horse-power.

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The Farm known as the State 100 acres in the South East corner of Lot No. 2, Cicero, about a mile from the town of Brewerton, on the outlet of Oneida Lake, consisting of an improvement of 40 acres fenced, with log buildings, and 60 acres of Woodlands.

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"	"	"	"	"	"	19	"
"	Survey	50	acres "	"	"	25	"
"	"	50	"	"	"	29	"
"	"	50	"	N. W.	"	36	"
"	"	50	"	N. E.	"	39	"
"	"	50	"	S. E.	"	58	"
"	Sub. 1	83	"		"	lot 76	"
"	" 7	30	"		"	"	"
"	Survey	50	"	N. W.	cor. of "	98	"
"	State	100	"	S. E.	"of "	65	Virgil
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Nine head of this valuable breed of animals are now offered for sale by the Subscriber, he having more than he can well keep on his farm.

Rose, 9 years old, a good milker, having given 25 quarts milk a day on pasture only. She is in calf by my prize bull Meteor, and will drop her calf about the middle of August.

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These animals will be sold at $100 to $125 per head. A credit will be given of six months or a year, if desired, for approved paper.

Gentlemen desirous of procuring the blood of the celebrated herd of Thomas Bates, Esq., of Yorkshire, England, may now have an opportunity of doing so, as the young animals possess that blood on the side of their sires; and the cows are in calf by Meteor and Wellington. The cows are descendants of the Bullock stock of Durhams. For the good milking qualities of these animals, &c., I would refer to the editor of the American Agriculturist. Letters, post paid, will receive an answer.

Troy, July 25, 1845. GEO. VAIL.

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The subscriber will soon receive from Gen. R. Harmon a supply of his superior winter and spring Wheats for sale; and from others, the best kinds of Rye, Oats, Barley, &c., &c. Prices will be given in our next. A. B. ALLEN, 205 Broadway, N. Y.

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